National Institute of Development Administration (NIDA)

NIDA International Conference for Case Studies on Development Administration 2013 (NIDA-ICCS)

September 5-6, 2013

At Chira Boonmak Hall, 3rd floor, Sayamboromrajkumari Building,
National Institute of Development Administration (NIDA),
Serithai Road, Bangkok, THAILAND

Organized by

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Bangkok, THAILAND

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Editors

Associate Professor Dr. Wisakha Phoochinda

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Preface

The third NIDA International Conference for Case Studies (NIDA-ICCS) will be held in Bangkok Thailand, during September 5-6, 2013, at NIDA's Bangkok campus. The conference brings together scholars and experts from a wide range of development administration fields to discuss practical and research issues related to teaching case studies.

NIDA proudly invites scholars and experts to send their case study in various fields of development administration relating to the conference theme and sub-themes.

Conference Theme and Sub-Themes

Main Theme: *Case Studies on Development Administration*

Sub-themes in various fields of development administration including:

Public Administration
Economics
Business Administration
Social Development
Environmental Management
Law, Legal Studies
Human Resource Development
Language and Communication
Applied Statistics
Decision Technology
Actuarial Science and Risk Management
Population and Development,
Information System Management and Computer Science
Tourism Management
Sustainability
Corporate Social Responsibility and Ethics
Communication Arts and Innovation

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National Institute of Development Administration (NIDA), is established in 1966, is a unique higher education institute in Thailand that offer exclusively graduate degree programs. NIDA was originally established to support national development in Thailand; this objective has now been expanded to encompass regional development in countries outside of Thailand, with the aim of producing advanced degree graduates who can serve in the public, business, and nonprofit sectors. NIDA holds its academic conferences and publish at least two journals regularly—NIDA Development Journal (in both English and Thai) quarterly, and NIDA Case Research Journal (in English) semi-yearly. For more information please visit our website: http://www.nida.ac.th.

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Communications Law Reform: Cases of EU/UK and Thailand

Yudh Jayapravitra[1]

Abstract

Since 1759, there have been ongoing debates whether governments should intervene into markets heavily (hands-on) or lightly (hands-off). The principle is that the intervention, either hands-on or hands-off, must be in public interests (e.g. being effective/efficient in fostering private competition and preventing private monopoly). In the communications sector, existing knowledge on intervention law is still controversial and inconclusive when addressing the hands-on/hands-off issue. Furthermore, existing knowledge assumes that convergence between broadcasting and telecommunications always increases market competition, which has resulted in the replacement of hands-on law with the hands-off alternatives. However, the assumption is falsified because, in many cases, convergence not only does not increase market competition but also increase market monopoly. This paper proposes that governments should intervene into communications markets by not assuming convergence always increases competition. It also proposed that communications law should be reformed by making no assumption about the convergence. The cases of communications law reform in EU/UK and Thailand are discussed

Keywords: communications, law reform

I. INTRODUCTION

Since the middle of 18th century, there have been ongoing debates whether governments should intervene into markets (hands-on) or not (hands-off). In the context of regulation which is a public law on market intervention, the principle is that regulation, either hands-on or hands-off, must be in public interests, e.g. being effective in fostering private competition and preventing private monopoly.

Communications (i.e. broadcasting and telecommunications) is a public utility which has significant impacts on economic development, social control, and national security of a country. Convergence in communications market is defined by the European Union (EU) in [1] as an ability of different network platforms to carry essentially similar kinds of communications services; and the coming together of consumer devices such as radio, television, telephone, and computer.

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[1] This case was written by Yudh Jayapravitra, PhD (Cantab) Director of Center for Law Reform Research Research Center, National Institute of Development Administration   dr.yudh@hotmail.com

In the convergence era, existing knowledge is still controversial and inconclusive when addressing the hands-on/hands-off dilemma in the communications regulation. There is a so-called convergence assumption that assumes the convergence between broadcasting (e.g. radio, television) and telecommunications (e.g. telephone, internet) always increases competition in communications market. The assumption has resulted in the replacement of hands-on regulation with hands-off alternatives. Is the convergence assumption correct?

II. BACKGROUND

In 1759, Adam Smith used the term 'invisible hand' in the Theory of Moral Sentiments to describe the self-regulating nature of markets. This implies that governments should not intervene because markets can effectively regulate themselves. In contrast, in 1923, John Maynard Keynes suggested that governments should intervene in markets because "in the long run we are all dead" in A Tract on Monetary Reform. The implication being that it would be too late for people to wait until the market could successfully regulate itself. However, in 1976, Milton Friedman, a recipient of the Nobel Prize in Economics, an opponent of Keynesian economics, proposed the 'free market' concept and advised that government policy on market intervention should be 'laissez-faire'. More recently, in 2001, Joseph Stiglitz, another recipient of the Nobel Prize in Economics, built the 'theory of information asymmetry' and argued that market intervention would almost always be necessary. A conclusion could be that, while Adam Smith and Milton Friedman would recommend a hands-off policy, John Maynard Keynes and Joseph Stiglitz would recommend hands-on. This implies that, after more than 250 years of ongoing debate, the issue of hands-on or hands-off is apparently still not conclusively resolved.

In communications regulation, there have also been similar debates. For example, UK privatisation in 1984 was a hands-off policy. The government privatised British Telecom because of the belief that private competition would result in more efficient communications services than the previous government monopoly provided. EU regulation in 1998 [2] was a heavy public utility regulation which was hands-on, but was a light or hands-off regulation in 2002 [3], but became hands-on and hands-off in 2009 [4] when functional separation (i.e. company breakup) was mandated for wholesale markets and light regulation was imposed to retail markets. The regulatory oscillation causes uncertainties and difficulties to both public and private interests.

Until recently, governments around the world still have no confidence in what their regulations should be, hands-on or hands-off [5]. For example, Federal Communications Commission (FCC) – the US regulator – still does not know what their broadband internet regulations should be, hands-on or hands-off or both [6]. Therefore, up to the present, there is still no conclusive answer to the hands-on/hands-off dilemma in communications regulation.

Communications regulation is costly (to both private companies and the public purse) but is expected to be effective in fostering competition among private operators. Private competition is the direct goal of communications regulation because regulators are normally not empowered by governing law to directly promote public interests such as reduce price,

improve quality, extend coverage, or promote innovation. Therefore, the private competition is expected to result in promoting the public interests. For example, Office of Communications (OFCOM) – the UK regulator – is empowered by the Communications Act 2003 to further the public interests "by promoting competition" [7]. Effective regulation results in private competition that should offer more efficient services.

However, if the regulation is ineffective, private monopoly will compromise public interests. Some of the world's richest people have amassed their wealth from monopolising communications markets. Examples are Carlos Slim Helú of Teléfonos de México – the world's richest person in 2013 [8], Masayoshi Son of Yahoo!BB [9] – Japan's richest person, and Thaksin Shinawatra of Shin Corp – Thailand's richest person [10].

This paper takes the stance that private monopoly is not in the public interests, and experience justifies it. The focus of this paper is on how communications regulation could be effective in fostering private competition and preventing private monopoly. The aim of this paper is to make a contribution by proposing a new research agenda for communications law reform, for the benefit of the public.

III. COMMUNICATIONS LAW REFORM

The convergence between broadcasting and telecommunications in communications market increases the number of private players. The increased number may result in increasing competition among private players. However, the result is not guaranteed.

Communications is monopolistic by nature and its market is an unlevel playing field. Small players are incapable of competing with large players even in the convergence era. For example, internet service providers would be unable to compete with telephone incumbents in the broadband business. In this case, convergence does not increase market competition. Furthermore, convergence not only does not increase market competition but can also increase market monopoly. For example, telecommunications monopolists would be able to leverage their monopoly power to monopolise broadcasting markets due to the convergence. In this case, convergence increases market monopoly.

Considering the EU 2002 regulatory framework that replaced the EU 1998 regulatory package due to the convergence assumption [3], this paper argues that the principle of light regulation might be ineffective in fostering competition and the EU might have overestimated the impact of convergence on market competition. Moreover, communications incumbents tend to monopolise markets and the EU might have underestimated the power of monopoly profit.

The argument is justified by the reform of EU communications regulation in 2009 [11]. The EU 2009 regulatory reform states clearly that the reform aims to 'strengthen competition' [12] using 'a powerful new instrument (i.e. functional separation)' [13]. This implies that the EU 2002 framework (i.e. Directive 2002/19/EC [14], Directive 2002/20/EC [15], and Directive 2002/21/EC [16]) was ineffective in promoting competition, and the convergence assumption is incorrect. The 2009 reform (i.e. Directive 2009/136/EC [17] and Directive 2009/140/EC [18]) entered into force with its publication in the EU Official Journal on 18 December 2009. The reform would later be transposed into national legislation in the 27 EU

Member States (e.g. the UK Communications Act 2003 [19]). EU and UK communications laws are shown in Table 1.

Table 1: EU and UK Communications Laws

	EU 2002 Law	EU 2009 Law
EU law	· Directive 2002/21/EC · Directive 2002/20/EC · Directive 2002/19/EC	· Directive 2009/140/EC · Directive 2009/136/EC
UK law	· Communications Act 2003	· New law

In summary, there has been an oscillation in the EU communications regulation, as shown in Table 2. The EU 1998 law shows what hands-on regulation is. The EU 2002 law illustrates how convergence assumption replaced hands-on with hands-off regulation. The EU 2009 law is hands-on to wholesale markets and hands-off to retail markets. The case of EU communications law strongly supports the argument that convergence does not always increase market competition. As a result, this paper concludes that the convergence assumption is falsified.

Table 2: EU Communications Regulatory Oscillation

EU Law	Regulatory Intensity
EU 1998 law	Hands-on
EU 2002 law	Hands-off
EU 2009 law	Hands-on & Hands-off

IV. NEW RESEARCH AGENDA

Literature on communications regulation can be separated into two groups – one is the literature that believes in government intervention (the Keynes school), and the other is the literature believing in market mechanism (the Friedman school). Until recently – especially as the result of the global financial crisis, there are literatures proposing that neither Keynes nor Friedman schools sufficiently inform or explain current regulatory challenges. The literature in [20] proposes that the general concept of regulation should begin with a simple question: "Why is regulation needed?" and two sub-questions: "Why do markets by themselves not suffice?" and "If there is to be government intervention, why does it take the form of regulations?". The literatures also propose new research agendas that are 'beyond market failure', 'beyond the economic theory of politics', and 'beyond command and control'.

This paper proposes that the research on communications regulation should start with a basic regulatory concept by not making any assumption about convergence. The basic concept is that regulation should be hands-on when there is market failure (e.g. non-competitive market) but hands-off when there is no market failure (e.g. competitive market), as shown in Table 3.

Table 3: Basic Regulatory Concept

	Hands-on Regulation	Hands-off Regulation
Market failure	✓	X
No market failure	X	✓

Moreover, communications regulation is interdisciplinary by nature. Communications is a technological public infrastructure operated by business undertakings. Regulation is a public law that has an economic goal of public interests, and legal means of regulatory instruments. Therefore, this paper proposes that the research should take into consideration the interdisciplinary nature of communications regulation by employing interdisciplinary (e.g. public policy, economics, law, sociology, environmental science, political science, business administration, technology management, etc.) perspectives.

Furthermore, it is important for government to do an Impact Analysis (IA) before making a "better law" from existing communications law, as shown in Figure 1. The IA posts queries such as What is the problem?, What are the policy objectives?, What are the policy options?, What are the likely economic, social, and environmental impacts?, and How do the options compare? For example, the summary of key analytical steps in the EU IMPACT ASSESSMENT GUIDELINES 2009 is shown in Figure 2 [21].
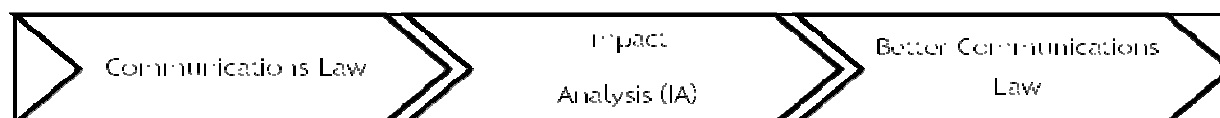

Figure 1: Impact Analysis (IA)

Summary of key analytical steps	
1	**Identifying the problem**
	• Describe the nature and extent of the problem.
	• Identify the key players/affected populations.
	• Establish the drivers and underlying causes.
	• Is the problem in the Union's remit to act? Does it pass the necessity and value added test?
	• Develop a clear baseline scenario, including, where necessary, sensitivity analysis and risk assessment.
2	**Define the objectives**
	• Set objectives that correspond to the problem and its root causes.
	• Establish objectives at a number of levels, going from general to specific/operational.
	• Ensure that the objectives are coherent with existing EU policies and strategies, such as the Lisbon and Sustainable Development Strategies, respect for Fundamental Rights as well as the Commission's main priorities and proposals.
3	**Develop main policy options**
	• Identify policy options, where appropriate distinguishing between options for content and options for delivery mechanisms (regulatory/non-regulatory approaches).
	• Check the proportionality principle.
	• Begin to narrow the range through screening for technical and other constraints, and measuring against criteria of effectiveness, efficiency and coherence.
	• Draw-up a shortlist of potentially valid options for further analysis.
4	**Analyse the impacts of the options**
	• Identify (direct and indirect) economic, social and environmental impacts and how they occur (causality).
	• Identify who is affected (including those outside the EU) and in what way.
	• Assess the impacts against the baseline in qualitative, quantitative and monetary terms. If quantification is not possible explain why.
	• Identify and assess administrative burden/simplification benefits (or provide a justification if this is not done).
	• Consider the risks and uncertainties in the policy choices, including obstacles to transposition/compliance.
5	**Compare the options**
	• Weigh-up the positive <u>and</u> negative impacts for <u>each</u> option on the basis of criteria clearly linked to the objectives.
	• Where feasible, display aggregated and disaggregated results.
	• Present comparisons between options by categories of impacts or affected stakeholder.
	• Identify, where possible and appropriate, a preferred option.
6	**Outline policy monitoring and evaluation**
	• Identify core progress indicators for the key objectives of the possible intervention.
	• Provide a broad outline of possible monitoring and evaluation arrangements.

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Figure 2: EU IMPACT ASSESSMENT GUIDELINES 2009

V. CASES OF EU/UK AND THAILAND

The communications law of EU/UK and that of Thailand are different. The Thai communications regulation is governed by several laws including the NBTC Act 2010 [22], the Broadcasting Act 2008 [23], the Telecommunications Act 2001 [24], the Radiocommunications Act 1955 [25], and the TPBS[2] Act 2008 [26] and its regulatory intensity is shown in Table 4. It differs from the EU/UK communications regulation, shown in Table 5, which is governed by only the Communications Act 2003 in many legal issues such as market definition and regulatory intensity. The differences between the Thai and the EU/UK communications laws are summarized in Table 6.

Table 4: Thai Communications Law

Communications Market Definition		Regulatory Intensity
Broadcasting	Service markets	Hands-off
	Network markets	Hands-on
	Facility markets	Hands-on
Telecommunications	Service markets	Hands-off
	Network markets	Hands-on
	Facility markets	Hands-on

Table 5: EU/UK Communications Law

Communications Market Definition	Regulatory Intensity
Retail markets	Hands-off
Wholesale markets	Hands-on

Table 6: Differences between Thai and EU/UK Communications Laws

	Issue	Thai Communications Law		EU/UK Communications Law
1	Regulator	· NBTC[3]		· OFCOM[4]
2	Relevant law	· NBTC Act 2010 · Broadcasting Act 2008 · TPBS Act 2008 · Telecommunications Act 2001 · Radiocommunications Act 1955		· Communications Act 2003
3	Market definition	· Broadcasting - Service market - Network market - Facility market	· Telecommunications - Retail market - Wholesale market	· Communications - Retail market - Wholesale market
4	Regulatory intensity	· Hands-off − Service market · Hands-on − Network market − Facility market	· Hands-off - Retail market · Hands-on - Wholesale market	· Hands-off − Retail market · Hands-on − Wholesale market

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[2] TPBS stands for Thai Public Broadcasting Service, an independent public broadcasting service provider of Thailand

[3] NBTC stands for National Broadcasting and Telecommunications Commission, an independent communications regulator of Thailand <www.nbtc.go.th>

[4] OFCOM stands for Office of Communications, an independent communications regulator of the UK <www.ofcom.org.uk>

VI. CONCLUSION

This paper has established the phenomenon of interest (i.e. should communications regulation in the convergence era be hands-on or hands-off?) for government decision. Existing knowledge is still controversial and inconclusive when applied to the phenomenon of interest. Furthermore, existing knowledge assumes that convergence always increases market competition, which has resulted in the replacement of hands-on regulations (e.g. EU 1998 law) with hands-off alternatives (e.g. EU 2002 law).

Having falsified the convergence assumption using interdisciplinary considerations and evidence from the EU 2009 law, this paper proposes that governments should regulate communications markets by not making any assumption about convergence but by employing a new research agenda. The new research should be conducted using basic regulatory concepts and interdisciplinary approaches, with an aid from the impact analysis (IA). This paper makes a significant contribution to new knowledge in the field of public law in general and communications regulation in particular.

The case of Thailand has been discussed. Thai communications law differs from EU/UK communications law in many legal issues. A new research agenda is needed to find out whether the Thai law is effective in fostering private competition and preventing private monopoly. If not, the Thai communications regulation must be reformed for public interests!

REFERENCE

[1]   "Green paper on the convergence of the telecommunications, media and information technology sectors, and the implications for regulation".
http://europa.eu/legislation_summaries/information_society/l24165_en.htm

[2]   "The EU 1998 Regulatory Package"
http://ec.europa.eu/information_society/topics/telecoms/regulatory/98_regpack/index_en.htm

[3]   "The EU 2002 Regulatory Framework"
http://ec.europa.eu/information_society/topics/telecoms/regulatory/new_rf/index_en.htm#reg

[4]   "The EU 2009 Regulatory Reform"
http://ec.europa.eu/information_society/policy/ecomm/tomorrow/index_en.htm

[5]   "The GSR 2009 Chairman's Report" http://www.itu.int/ITU-D/treg/Events/Seminars/GSR/GSR09/GSR_Chairman_Report.pdf

[6]   http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-298861A1.pdf

[7]   http://www.ofcom.org.uk/about/sdrp/

[8]   http://www.forbes.com/profile/carlos-slim-helu/

[9]   http://www.forbes.com/lists/2010/10/billionaires-2010_Masayoshi-Son_UQOA.html

[10]   http://www.forbes.com/lists/2009/85/thailands-richest-09_Thaksin-Shinawatra_54T2.html

[11]   http://ec.europa.eu/information_society/policy/ecomm/tomorrow/index_en.htm

[12]   http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1812&format=HTML&aged=0&language=EN&guiLanguage=en

[13]   http://ec.europa.eu/information_society/doc/factsheets/tr2-morecompetition.pdf

[14]   "Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of electronic communications networks and associated facilities (Access Directive)" http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0007:0020:EN:PDF

[15]   "Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive)" http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0021:0032:EN:PDF

[16]   "Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive)" http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0033:0050:EN:PDF

[17]   "Directive 2009/136/EC of the European Parliament and of the Council of 25 November 2009 amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No 2006/2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws" http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0011:0036:EN:PDF

[18] "Directive 2009/140/EC of the European Parliament and of the Council of 25 November 2009 amending Directives 2002/21/EC on a common regulatory framework for electronic communications networks and services, 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, and 2002/20/EC on the authorisation of electronic communications networks and services" http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0037:0069:EN:PDF

[19] http://www.legislation.gov.uk/ukpga/2003/21/contents

[20] Stiglitz, J. (2009). "Government failure vs. market failure: principles of regulation". *Government and Markets: Toward A New Theory of Regulation*. Cambridge University Press.

[21] http://ec.europa.eu/governance/impact/commission_guidelines/docs/iag_2009_en.pdf

[22] http://www.ratchakitcha.soc.go.th/DATA/PDF/2553/A/078/1.PDF

[23] http://www.ratchakitcha.soc.go.th/DATA/PDF/2551/A/042/61.PDF

[24] http://www.ratchakitcha.soc.go.th/DATA/PDF/00027044.PDF

[25] http://www.ratchakitcha.soc.go.th/DATA/PDF/2498/A/011/208.PDF

[26] http://www.ratchakitcha.soc.go.th/DATA/PDF/2551/A/008/1.PDF

Mapping "the Retro Marketing Strategy" in the Retro Market Tourism under the Creative Economy to AEC

Chuensumon Bunnag[1]
Bantita Thubprateep[2]

Abstract

The Creative Economy was announced to be a national policy in the Thai National Economics and Social Development Plan issue no.11 (2012-2016) to drive Thai economic mechanism called "Creative Thailand project". Until now, Thailand has been implementing the creative economy, which takes in competitiveness of business sectors i.e. creative entrepreneurs, small businesses and communities to generate the creative thinking and to differentiate products and services in creativity. The "Creative Economy" and "Creativity" have played an important role in business sectors, especially in the tourism industry. Tourism industry has been strategized to be one of the fifteen flagship industrial groups to enhance the competitiveness potential in generating jobs, distributing income and promoting investment. It has been integrated with the root of distinguished cultures in each community, as well as the innovation technology to enhance their products and services.

Accordingly, the rate of Thai tourists in the past three years has risen in terms of travelling in the Retro Market tourism, such as ancient markets and floating markets, and the average rate is continuously growing by 30-40 percent per year. Retro Market tourism has become trendy itinerary for Thais and foreign tourists from both European and AEC countries.

This case study conveys a brief review of two Retro Market tourism sites under the creative economy. They are Ampawa floating market in Samutsongkram province and Plern Wan market in Prachub Khirikhan province. The analysis of how both markets get successful in applying two types of **"the Retro Marketing Strategies"** to their creativity to attract tourists is illustrated in the case. The first strategy is called "Retro Retro" in which the Ampawa market employs nostalgic feelings to associate with the past. The nostalgia as a term referring to the "good old days" from one's earlier life describes a sentimentality for the past, typically for a period or places with content personal associations which can be applied to present products, places and services. On the other hand, the second strategy is called "Retro Nova" in which the Plern Wan market utilizes to create a replica of an authentic market that stimulates new consumer experiences and perceptions. The case points out a significant

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challenge and leaves a question for further research, however. To achieve Creative Thailand, what core values have to associate with consumers' experiences and their lifestyles to get interesting in the Retro Market tourism? Furthermore, 7Ps in the marketing mix and SWOT analysis of both markets show how their factors affect the decision making of Thai tourists in the Retro Market tourism.

Keywords: Creative Economy, Retro Marketing Strategy, Retro market tourism, Nostalgia and Lifestyles

<u>**บทคัดย่อ**</u>

"เศรษฐกิจเชิงสร้างสรรค์ (Creative Economy)" ได้ถูกประกาศเป็นนโยบายระดับชาติที่รัฐบาลเลือกใช้เป็นกลไกในการขับเคลื่อนเศรษฐกิจและได้บรรจุลงในแผนพัฒนาเศรษฐกิจและสังคมแห่งชาติฉบับที่ 11 (ปี 2555-2559) เพื่อกระตุ้นนโยบายเศรษฐกิจสร้างสรรค์ของประเทศไทย (Creative Thailand) และเพิ่มมูลค่าทางเศรษฐกิจของอุตสาหกรรมสร้างสรรค์ ในช่วงปีที่ผ่านมาคำว่า "เศรษฐกิจเชิงสร้างสรรค์" หรือ "ความคิดสร้างสรรค์" มีบทบาทในสังคมไทยเป็นอย่างมาก โดยเฉพาะอุตสาหกรรมการท่องเที่ยวไทย ซึ่งถูกกำหนดเป็นหนึ่งใน 15 กลุ่มอุตสาหกรรมสร้างสรรค์ที่นำไปสู่การจ้างงาน สร้างอาชีพ และการลงทุนในธุรกิจที่เกี่ยวเนื่อง กลายเป็นฟันเฟืองสำคัญในการขับเคลื่อนเศรษฐกิจ

อุตสาหกรรมท่องเที่ยวของไทยสามารถนำความเป็น "อัตลักษณ์" หรือ "เอกลักษณ์" ของสถานที่ท่องเที่ยวต่างๆ ที่มีอยู่ไม่ว่าจะเป็นด้าน สิ่งแวดล้อม ประวัติศาสตร์ ศิลปะ วัฒนธรรม จารีตประเพณีวิถีชีวิตความเป็นไทย และเทคโนโลยีที่โดดเด่นมาผสมผสานกับ "ความคิดสร้างสรรค์" ได้อย่างลงตัว ซึ่งสามารถช่วยเพิ่มคุณค่าสร้างมูลค่าสินค้าและบริการของอุตสาหกรรมท่องเที่ยว จะเห็นว่า การท่องเที่ยวตลาดย้อนยุคและตลาดน้ำของนักท่องเที่ยวชาวไทยตลอด 3 ปีที่ผ่านมานั้น มีอัตราการเติบโตเฉลี่ยต่อเนื่องถึง 30-40 เปอร์เซ็นต์ต่อปี ซึ่งแสดงให้เห็นว่าตลาดย้อนยุคเป็นโปรแกรมท่องเที่ยวที่นิยมเป็นอย่างมากสำหรับนักท่องเที่ยวชาวไทยและชาวต่างประเทศทั้งในประเทศยุโรปและประเทศในอาเซียน

บทความนี้จึงขอนำเสนอกรณีศึกษา ตลาดย้อนยุค 2 แห่งภายใต้แนวคิดเศรษฐกิจสร้างสรรค์ คือ ตลาดน้ำอัมพวา จังหวัดสมุทรสงคราม และ ตลาดเพลินวาน จังหวัดประจวบคีรีขันธ์ ซึ่งได้นำแนวคิด กลยุทธ์ตลาดย้อนยุค (Retro Marketing Strategy) 2 รูปแบบมาประยุกต์ใช้เพื่อดึงดูดนักท่องเที่ยว กลยุทธ์แรกคือ กลยุทธ์ Retro Retro ซึ่งตลาดน้ำอัมพวาได้นำกระแสอารมณ์การโหยหาอดีต (Nostalgia) มาเพื่อเติมเต็มการระลึกถึงภาพแห่งความสุขในวันวานที่มีเรื่องราว ตำนานและอารมณ์ที่สามารถสัมผัสได้มาเชื่อมโยงกับสินค้าและบริการ กลยุทธ์ที่ 2 คือ กลยุทธ์ Retro Nova ซึ่งตลาดเพลินวาน ได้นำสิ่งที่อยู่ในอดีตกลับมานำเสนอใหม่เพื่อสร้างประสบการณ์และการรับรู้ใหม่ให้กับลูกค้า

ดังนั้น ในกรณีศึกษานี้ได้มีคำถามที่เอื้อต่อการวิจัยต่อไปว่า การใช้เศรษฐกิจสร้างสรรค์ของประเทศ
ไทยให้สำเร็จได้นั้น อะไรคือ คุณค่า สำคัญที่เชื่อมโยงประสบการณ์และรูปแบบการดำเนินชีวิตของ
นักท่องเที่ยวให้หันมาสนใจตลาดย้อนยุค การวิเคราะห์ส่วนประสมทางการตลาดและการวิเคราะห์จุดแข็ง
จุดอ่อนอุปสรรคและโอกาสก็ถูกนำมาใช้ในการวิเคราะห์เช่นกันว่า อะไร คือ ปัจจัยสำคัญที่มีผลกระทบต่อ
การตัดสินใจในการมาท่องเที่ยวตลาดย้อนยุคของนักท่องเที่ยว

คำสำคัญ: เศรษฐกิจสร้างสรรค์ กลยุทธ์ตลาดย้อนยุค ตลาดย้อนยุค การโหยหาอดีต และรูปแบบการดำเนินชีวิต

The aims of the case study

Today, tourism industrial development under the Creative Economy has become one of the interesting tourism patterns which take in the "cultural identity" from history, arts, norms, Thai lifestyles, and the innovation technology to create distinguished tourist attractions. In Thailand, cultural tourism in such places as floating markets and ancient markets has become a trendy itinerary for Thais and foreign tourists from both European and AEC countries. Thai cultural tourism has been strategized to be one of the fifteen flagship industrial groups to enhance the advantage competitiveness under the Creative Economy in AEC. In the past, the retro market was not popular among Thai tourists. The modernization of Thailand, however, has caused the old Thai lifestyles alongside the river including traditional Thai houses to gradually disappear. Not until recently have nostalgic feelings urge people to bring back the feel of those good old days, together with the evocation of a simpler, happier time. Therefore, the retro markets were rejuvenated in a variety of tourist attractions around Thailand to fill the needs of Thai tourists in personal association with products, places and services presentation.

Put another way, the retro marketing concept has been applied to using things from yesterday to create new things for today. As a case study of bringing back things to appeal to the nostalgic market, the cases of Ampawa Market in Samutsongkram province and Plern Wan market in Prachuab Khirikhan province will illustrate to analyze how both markets get successful in applying two types of "the Retro Marketing Strategies". The first one is "Retro Retro" strategy and the second is "Retro Nova" strategy. Therefore, the learning objectives of this case are firstly to do SWOT analysis and to study how the retro marketing strategies of both retro markets have been employed. The second objective is to explore the relationships of lifestyle patterns and the experience with both markets which are based on the research in the title of "Lifestyles and Tourist Behaviors in Retro Market" (Bantita, 2013). The research was relevant to this issue in terms of finding out what marketing factors affect the decision making of Thai tourists in the Retro Market tourism. Then, this case study analysis is to be discussed in MBA and BA classrooms to review SWOT analysis and the retro marketing strategies which will be useful for academics, marketers and researchers. It is foreseen to benefit further research and develop other related perspectives in marketing strategies and the competiveness of cultural tourism management in attracting more foreign tourists from both European and AEC countries.

Reviewing the Creative Economy definition in the Retro Market Tourism

The United Kingdom is the first country to give importance to the Creative economy in driving its economy. The UK has successfully become a model country in developing Creative Economy and been regarded as the "World's Creative Hub". However, the first definition of a "Creative Economy" was developed by the British writer John Howkins in 2001. According to Howkins' definition, the various activities that comprise a creative economy have one thing in common: they are a result of individuals using their imagination and exploring (or protecting themselves from others doing so) related economic value. We should understand that a creative economy is more than just the Internet and information technology companies. Rather, its coverage is wide-ranging, including the cultural sector, tourism, arts and media, among others – basically anything that you can apply your ideas to add value in the production and distribution processes (Chodechai,2013).

The Office of Knowledge Management and Development (Prime Minister's office) defines Creative Economy as an economy consisting of the industry based on personal creative thinking, skills and special competency which are employed to create jobs and affluences. It has been conserved by the intellectual property right and passed on from generation to generation.

The Office of national Economic and Social Development Board (The Office of national Economic and Social Development Board and TCDC, 2552) further defines Creative Economy as the concept in driving economy based on knowledge, education, creativity and intellectual property that are associated with the cultural backgrounds including the accumulated knowledge of societal and technological innovation.

Furthermore, Thailand Creative & Design Center (TCDC) (The Office of national Economic and Social Development Board and TCDC, 2552) elaborates that Creative Economy is the value creation of human thinking. The production sector which leads to the development of creative industries includes production activities that rely on creativity as an important raw material. Drawing concepts from various scholars, Creative Economy is the new economy driven by the diversity of cultural, economic and the technological integration in order to create an economic value through the distinguished identity of products and services.

As previously mentioned, the Creative Economy was announced to be a national policy in the Thai National Economics and Social Development Plan issue no.11 (2012-2016) to drive Thai economic mechanism called "Creative Thailand project". It is divided into four major flagship groups namely heritages, arts, media, and functional creations. This is an addition to the existing fifteen flagship industrial subgroups. The cultural and heritage tourism is under the Heritage group. It is significant to show that Thai economy is growing fast and restructuring itself. It attracts investments and services which account for 45% of GDP, while tourism is a key source of income. Thailand is among the top 20 exporters of creative goods worldwide (Creative Economy report, 2012).

Accordingly, the rate of Thai tourists in the past three years has risen in terms of travelling in the Retro Market Tourism, such as ancient markets and floating markets, and the average rate is continuously growing by 30-40 percent per year.

To develop Creative Thailand, the tourism industry has become an important factor to drive Thai economic mechanisms that encompass various costs called "cultural capital". It adds up "value" to create and to differentiate from the legend and distinguished cultures in each community in order to add an economic value under the Creative Economy. This idea leads to the sustainment of cultural heritage and cultural diversity which reflect Thai ways and Thai lifestyles. This has become a global trend in international trading of creative tourism industries. Take the Korean Pop culture of which the slogan is "the culture contents, the future power of Korea". Korea has successfully exported their variety of cultural products in the forms of music, movies, superstars, fashion, tourism and food to many countries around the world.

As another example of Creative Economy, Hong Kong strategized itself to be an exhibition country alongside the creative economy development to focus on Service-Orientated Economy. Hong Kong also focuses on building its identity of products and services which is based on aesthetic and symbolic value and cultural value. Moreover, the Hong Kong government aims at positioning the country as a creative capital of Asia by emphasizing mega-projects for getting international awareness of Hong Kong's creative industry. Those projects include, for example, Business of Design Week to road show the creative industries around the world and Creative Hong Kong in London and Hong Kong at Cannes 2002 (Warakorn, 2553)

"Bollywood" is another example of a creative movie industry in India. It is the informal term popularly used for the Hindi-language film industry based in Mumbai (Bombay), Maharashtra, India. Songs from Bollywood movies are generally pre-recorded by professional playback singers, with the actors then lip synching the words to the song on-screen, often while dancing. The term is often incorrectly used to refer to the whole of the Indian cinema; however, it is only a part of the total Indian film industry, which includes other production centers producing films in multiple languages. Bollywood become the largest film producer in India and one of the largest centers of film production in the world. Here is to show that it is relevant to the creative and distinguished culture of Indian Identity.

Let's look at neighboring countries. Vietnam as one of developing countries starts to give an important focus to accomplishing Creative Economy in during the initial phase. Even though there is no plan for developing a Creative Economy, Vietnam collaborates with RMIT University and the Australian Research Council Centre for Excellence in Creative Industries and Innovation (CCI)-Australia by focusing on Tourism Industry. In 2012, the Tourism Industry of Vietnam had astonishing growth, generating US$5.3 million, or 4-4.5 percent of GDP from 5.5 million foreign as well as domestic tourists Vietnam is attempting to level up its identity as a regional tourism country in 2020 and eventually the tourist destination of the world (Karadee, 2555). These will generate an income of US$18-19 million, constituting 7 percent of GDP and being able to create more than three million jobs.

From studying the data of Creative Economy, the finding shows that the approach of Creative Economy under the Thai National Economics and Social Development Plans no.8 to no.11 (2012-2016) tries to deeply study how to create economic value from various cultural costs. It also gives importance to strength and advantages of the national culture. It is evident to say that "culture" has become an important production factor of Creative Economy development especially in Thai tourism which has high cultural costs and includes a variety of cultural traditions. Tourism is one of fifteen creative industries which reflects Thai identity well and leads to the product and service creation in order to compete with many countries under Creative Economy.

Therefore, challenge questions required to be answered here is, firstly, how to bring added value to develop products and services and at the same time fill the needs of the tourists. Secondly, what are the key success factors that help to create economic value and to associate the experiences of tourists to retro marketing?

Mapping Retro Marketing Strategy : Retro Retro Vs Retro Nova

Retro marketing is the use of nostalgia as a marketing theme by pointing people to the past, evocation of a simpler, happier time and the good feeling. Retro Marketing comes from the vocabulary of "Retrospective" that means the memorial of the past presentation. It has been applied as the concept of Retro Marketing to respond to the needs of consumer to associate their experiences with the past. This concept is elaborated by the presentation of things in the past that contain the lost values. This, therefore, helps to revive such values that are added to the current products. Especially, the meaning of Thai identity becomes the symbolic value which is applied to the nostalgic phenomenon in Thai society. As Michel Foucault puts, nostalgia is an experience of impossible moment. We do so because it never comes back into the real world except for the story telling in a variety of forms (Danai, 2552).

Consequently, the trend of retro market is widespread and popular for applying to the differentiation of each competitor. Now, we can find many of retro products, for example, retro advertising art, retro games, retro music, and retro furniture and decorations. Moreover, entertainment forms have also applied retro concepts to memorialize the happiness in the past and been able to increase their prices. The customers who buy these products perceive that the memorial of happiness time and admired the great past that will never have the present things can substitute.

The retro tourism is one of the businesses that employs the retro marketing strategy to respond to the nostalgic feelings. It gains popularity among Thai and foreign tourists in terms of perceiving storytelling and learning norms in different ways. This has become a charm of retro market tourism which applies this nostalgic feeling to present distinguished culture and experiences of tourist attractions to customers. This practice arouses people to long for cultural product value of the past as well as its legend.

The term nostalgia means missing which is derived from the Greek word " Nostos," meaning going back home, and suffixed with –algia, meaning a pain feeling (Danai, 2552). Then, the nostalgic feeling is expressed through material, construction and culture as well as symbols or forms of the past, even though they are outmoded. Nostalgia is, in a sense, an attempt to capture the past through cultural consumption. Accordingly, the retro marketing strategy implements such nostalgic feelings to revive the good old days.

This case study applies two types of the retro marketing strategies called Retro Retro and Retro Nova to analyzing two retro market sites, Ampawa market and Plern Wan market. The Retro Retro strategy is defined as the copycat of the past that tries to maintain product and service benefits with minimal changes. The classic or old-fashioned products and services are still maintained as the highlight of ancient markets around Thailand, for example, Samchuck market in Suphanburi, Klongsuan 100 years market, Banmai market in Chachoengsao, and especially Ampawa floating market in Sumutsongkram.

On the other hand, Retro Nova or Nuevo emphasizes the creation of products and services by trying to shape forms of the past. To elaborate, Plern Wan Market uses the Retro Nova concept to create a replica of an authentic market that stimulates new consumer experiences and perceptions to trigger their nostalgic feelings The products and services of the Retro Nova concept are adapted in various dimensions including the quality and functional benefits, and a working system that fulfills the needs of tourists better than before. These tourist attractions include, for example, Ayotataya floating market in Ayutatya and Four-Region floating market. Regarding Plern Wan market, it applied marketing idea of retro nova in terms of bringing the successful things in the past to create a new presentation to customers. Plern Wan Market has become a popular tourist attraction among teenagers and fresh graduates through presenting old-style restaurants, coffee shops, clothes shops, candy shops as well as liquor shops. These are built up in the presentation alongside the ambience of 1956 decorated with wood and tin sheets. This immediately provokes a nostalgic feeling in its customers.

Basically, there are slightly different approaches between the two retro marketing strategies. Yet, what they both have in common includes the delivery of experience, impression, emotional benefits through value associated with the deep nostalgic feeling of the customers. The storytelling of legend and the meaning of products and services leading to the success of retro marketing can be delivered to every target group regarding sex, age and career. Not only have the aging people longed for the past, but the middle age people have also brought back their good old days with friends and families. Even young people still show passion for the classic things from the past. It is important to say that retro marketing is not only associated with the past but also rejuvenated to bring back "value" to link the past and to inherit the future.

The case of Ampawa Market as Retro Retro Marketing

Ampawa Floating Market in Ampawa District of Samut Songkhram Province is the most popular among tourists and surely is very crowded. Amphawa is a district (Amphoe) of Samut Songkhram Province, located slightly inland at the northwestern tip of the Bay of Bangkok (72 km from Bangkok), occupies an area of 416 square kilometres and is administratively divided into 3 districts: Amphoe Muang, Amphoe Ampawa, and Amphoe Bang Khonthi. Ampawa is a small community, located along a canal. The canal branches out from the Mae Klong River. In the past, the city of Ampawa was the center of the province. There is a large market located at the waterfront which is a hub for commerce. Samut Songkhram is the province of fertile land, plants and food grains, growing several kinds of vegetables and fruits, as well as producing a vast variety of seafood products, before releasing them to Ampawa Floating Market in the Mae Klong river.

It also has an interesting history dated back to the early Rattanakosin period. In the late Ayutthaya period during the reign of Somdet Phrachao Prasatthong, this area was called Bangchang. Evidence shows that this small community was abundant in agriculture and commerce and there was a market called Bangchang Market run by a woman named Noi. She came from a rich family finally became a member of the Queen's royal family –"Na Bangchang". In that period, Bangchang was called "Suan Nok" which means the local garden of the member of the Queen's royal family. Bangkok, however, was called "Suan Nai" which means the place of the King's royal family. However, these names and practice were cancelled in the reign of King Rama IV. Therefore, Ampawa has long been an important city associated with the Thai history.

At present, "Venice of the East" is a nickname of Ampawa which has a spectacular network of small canals thorough the district; some of which flow through the Ampawa market. The market mainly consists of old wooden row houses lying along both sides of the Amphawa Canal covering a distance of about 800 m. Ampawa is called the first "Evening Retro Market" which opens on Fridays, Saturdays and Fridays starting from 16.00 p.m. till 23.00 p.m. Because of its evening business hours, Ampawa floating market can responds to the needs of customers who do not like hot weather in daytime among the crowd. These old-style wooden houses have typically been transformed to shophouses selling all kinds of edible stuff, Amphawa T-shirts, souvenirs, decorative items, handmade products, works of art, etc. There is a wide range of souvenirs and gifts, and they are both chic and cheap. It is only a 1:30-hour drive from Bangkok.

Due to its short distance, Amphawa Floating Market is one of the most popular weekend getaways for the Bangkokians, especially for those who enjoy eating seafood. Among many good things of this market is the fact that tourists will hardly catch a glimpse of a foreigner and that it is more than a scene for holiday snaps. Thus, Amphawa is a nice place to observe authentic Thai ways of life. Amphawa Floating Market was revived from the old market where fruit and vegetable growers used to trade their produce 50 years ago. In the surrounding area, a recommended place is **King Rama II Memorial Park**, which is located just next to the floating market. In the park, there are many places of interest, including the King Rama II Museum – four buildings built in traditional Thai architectural style. The museum displays the ancient art objects and historical artifacts dating back to the early Rattanakosin era.

Additionally, **The Ampawa-Chaipattananurak Conservation Project** serves as the reminiscence of the past. The **Ampawa-Chaipattananurak Conservation Project** today has become a center of collaboration to conserve and develop Thai traditions on which the Ampawa residents have had pride themselves. The implementation focuses on local participation with the Chaipattana Foundation as a planner and facilitator to ensure cultural conservation and social development on the path of self-reliance and sustainability. Because the cultural heritage at the Ampawa riparian community is not intended to be kept alive merely within the local community, the Project has been promoted as a destination for ecotourism for both Thai and foreign visitors. The project area is arranged into five sections: the first is **Community shops,** located along the Pracha-uthit Road, of which the space is offered for rent to local traders within the Ampawa Municipality. Visitors can enjoy browsing shops that sell local and Thai crafts and antiques as well as souvenirs. Local and traditional food, desserts and fruits are always available.

The second section is **Chaan Chala Coffee & Tea House** that is situated by the Ampawa canal, *Chaan Chala* has become a popular rendezvous for the project visitors who can sit back and enjoy the vintage and retro interiors in peace while observing the lively floating market outside. Managed by the Chaipattana Foundation, *Chaan Chala* (Platform) also serves hot and cold beverages together with tasty ice cream and Thai sweets. Visitors can also shop for the Project's high quality gifts and souvenirs. The third is **Ampawa Community Exhibition** that is located close to *Chaan Chala*. It is the area for exhibition of items and information to promote local culture and traditions. This is a section for visitors to gain knowledge about the Ampawa riparian community's past and present.

The fourth is **Agricultural Demonstration Farm**. It is an orchard which has been developed to demonstrate integrated fruit farming based on local wisdom. Fruit farming is considered to be the integral part the livelihoods in Ampawa. This farm also serves as a centre for information sharing between agricultural practitioners and experts. Lastly, the fifth is *Nakhawarang* **Cultural Playground** This multi-purpose area hosts performances and activities to promote local culture and traditional ways of life along the Mae Klong River. They rotate monthly and include the following: Thai traditional musical band, demonstration of coconut leaf weaving, traditional cooking, traditional Thai puppet show and a demonstration of leather shadow play carving.

(www.chipat.or.th)

Tourists can take boat tours to not only experience the nature of old Thai lifestyles alongside canals but also to see fireflies on mangrove apple trees around Ampawa inland, besides various traditional homes. The charm of Ampawa is the ambience of calm and simple life that attracts tourists from many countries around the world. Thus, the objective of learning the case of Ampawa here is to draw up a SWOT analysis of the Ampawa floating market. The research entitled "Lifestyles Patterns and Tourist Behaviors in Retro Market" (Bantita, 2013), which surveys satisfaction of 400 tourists towards the seven marketing mixes of Ampawa Floating market in terms of product, price, place, promotion, people, process and physical evidence, reveals that the product factor has 4.565 mean scores which outstands the other six marketing mixes. This is relevant to the strength of Ampawa

floating market which implements the Retro Retro marketing strategy to express the "value" of nostalgic feelings through the local wisdom, the simple life alongside the river. Moreover, Ampawa market offers both land and water activities, for example, a program of paying homage to nine temples, firefly boat tours and authentic home stays. Additionally, these strengths are good opportunities for the local people to add up value of local product development and to attract tourists from many countries, especially the AEC's tourists who share similar cultures.

In regards to the price, tourists are satisfied with this factor at 3.616 mean scores which is at the good level. This is relevant to its strong points showing that the correlations of price and products are suitable. The prices of products are not high because of the incorporation of merchants' policy in Ampawa district. However, this threat makes the competition among other merchants outside community to gain more profits according to this policy.

For the place factor, Ampawa floating market is 1.30 hours away from Bangkok. There are several kinds of efficient and safe transportation available. The satisfactions mean score of this factor is 3.678. This indicates the strength of various kinds of transportation. Meanwhile, the threat for Ampawa floating market is its business hours, for it is operational only on weekends. This then makes the market so crowded on the days, and therefore not so safe for tourists and their belongings.

In regard to promotion, there are advertisements through many channels such as TV, radio, the Internet, and words of mouth of tourists who have ever visited Ampawa floating market. Moreover, special events on traditional occasions and the publicity made tourists satisfied at 4.069 mean scores. This is relevant to the strength of advertisement and public relations through various channels. Besides that, Ampawa floating market provides WiFi hot spots throughout the market in order to widen its social network and to promote marketing activities at the same time. Ampawa has successfully established its brand awareness of a floating market which reflects value of a historical Thai community.

As for the people factor, there are not only officers who provide services and information, but merchants and entrepreneurs, as well as, local people also help spread the words. The research finding shows that the tourists are satisfied with this factor at 3.647 mean scores. This is relevant to the strength of the Ampawa municipality which is a very good organizer and supporter of the community growth.

In terms of the process factor, there are many facilities e.g. ATMs, public telephone booths and nursing units to facilitate tourists, as well as tourism activities, such as art performances and boat tours along the canals. The research finding shows the mean score of tourists' satisfactions at 2.921 which is the least among the seven factors. Considering threats regarding this factor, it shows worries about crimes that could affect the retro market tourism. Ampawa market should have security guards to protect and facilitate tourists to make them feel safe and enjoy their visit.

In case of physical evidence, Ampawa floating market has unique decorations, which are attractive, and at the same time reflect its identity and the feel of a retro market. Moreover, there are enough cleaning restrooms and relaxing places. Considering the strength of Ampawa market, the study shows that the old houses and simplicity of life are the charisma of an evening floating market, like Ampawa. These points can be taken as opportunities for the tourists to indulge in the nostalgic feeling that results in the mean scores of 3.984. Still, as Ampawa floating market opens only on weekends making the market overcrowded, there is a threat of lacking food and dining areas. Another threat following such fact concerns the merchants' social awareness and responsibility. The crowd probably throws rubbish into the water and this irresponsible practice can affect the environment of the natural Ampawa community and may destroy the beauty of the floating market.
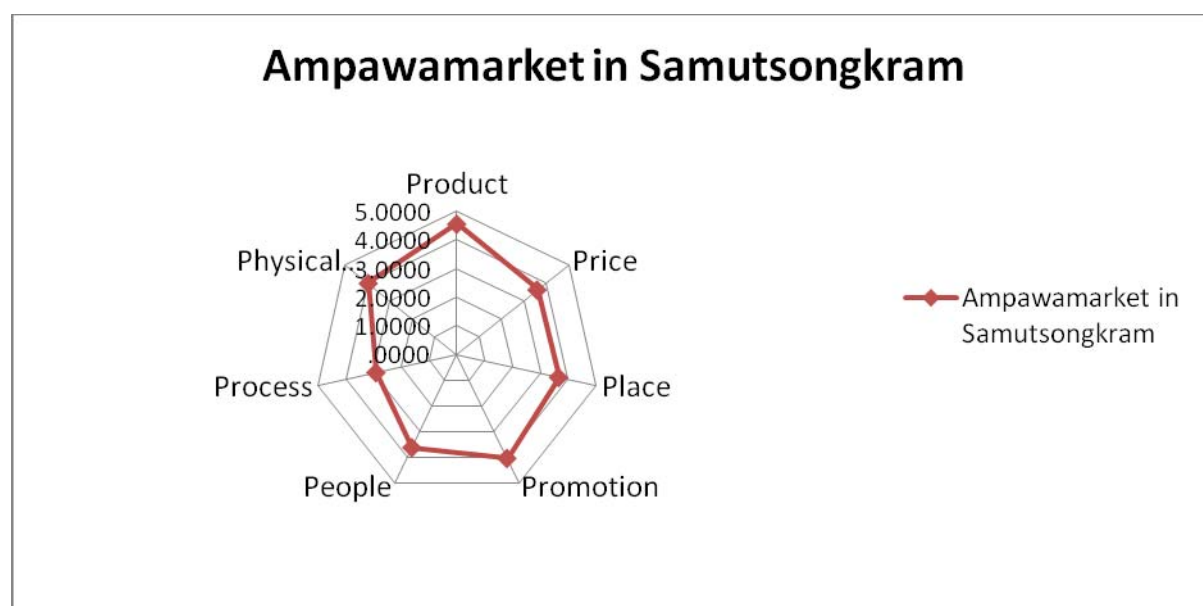
Exhibit 1: the spider web of 7Ps marketing mixes of Ampawa Floating Market

The case of Plern Wan as Retro Nova Marketing

Plern Wan is located in Hua Hin district of Prachuap KhiriKhan province; it offers visitors nearly everything you wish to buy. Tourists browsing through a variety of shops including clothing boutiques, a beauty salon, food stalls, a massage center, a jewellery outlet, as well as record stores and restaurants. Tourists will get the memories of the past through the passionate setting. Walking through this faux village located on Petchkasem Road between Soi Hua Hin 30 and 40, is like stepping back into time; a nostalgic time capsule that affords tourists a glimpse of the seaside town's "good old days".

Plern Wan is the coinage of two Thai words: *plearn* ('enjoy') and *wan* ('yesteryear'). Plearn Wan shows tourists the old style of a small commercial district that tourists would have experienced in Thailand many decades ago, before the development of modern-style commercial complexes. Tourists get charmed by the captivating old-fashioned shopping experience at Plern Wan. Tourists will walk through the exclusive wooden entrance, which gives them the feeling of an old time. Therefore, Plern Wan has characteristics of an eco-

vintage village. The two-storey wooden complex of stylized old-fashioned shophouses, reminiscent of those that made up the Thai-Chinese neighbourhoods of Bangkok and Hua Hin, includes shops and cafes that hawk a variety of vintage merchandises, retro fashion and toys, and home-made food and ice cream. This is a great outing for the family. Its concept of "a living museum" is not just about unique architecture, but a place of lively memories. At Plern Wan, tourists get soaked in the atmosphere which was salient in the past, reflecting the lifestyle of the people, food, drinks, architecture, language, etc. One café sells coffee freshly brewed in a traditional Thai style, while another vendor offers mini crispy pancakes stuffed with shredded coconut, sweet corn, taro, and coconut jam. Children gather around a man fashioning '*nam tan pan*' (local candy) into tiny animals. A music store offers LP records by crooners from the '50s and '60s. A pharmacy displays herbs, roots and other concoctions that were once dispensed by grandmothers to treat the sick. There is even a gold retailer and a pawnshop.

Moreover, tourists will feel relaxed and lively by a live band performing close to the entrance at PlearnWan. PlearnWan Coffee, prepared using old-fashioned methods, awaits tourists from other places, and there is a range of beverages available for them to select. The Chai Lai Boutique (Chai lai means 'pretty') is just nearby, visitors can buy colorful clothes here. The shop provides a vintage feel, adding to the sentimental ambiance. Additionally, the outlet that sells snacks (khanom) and plastic toys of old days is the most attractive shop that gains attention from visitors. This shop offers a complete range of classic Thai snacks which are hardly found today. Besides that, the highlighted activity to bring back the old days is a Ngaan Wat. A Ngaan Wat (or a traditional temple fair) generally displays some shows and has numerous stalls and a Ferris wheel. On weekends the highlight is Nang Klang Plaeng, an outdoor cinema showing old classics. It is so easy to lose sense of time at Plern Wan in such a way that tourists walking through its exit can possibly get reality shock. There are free movies available including comedies, romances as well as thrillers, shown here on Fridays and Sundays at 7.30 pm and 9.30 pm.

Plern Wan has given classic, beautiful Thai names to its several outlets such as a barber shop called Lert Samantan, which was once a popular Thai slang meaning 'cool', and a bakery called Porn Kam Warn, which literally means 'serving sweet bites'. These Thai words are no longer in use, however. Lately, PlearnWan launched a second phase and received an extremely positive response from sensational visitors. A number of restaurants that provide two small food courts are among the new additions. **Piman PlearnWan** (Piman literally means heaven) offers a mid-range accommodation option for interested visitors to stay over for a night or two. The glamorous and old-style setting is perfect for those who wish to bring themselves into pleasant remembrances.

Nowadays, Plern Wan market is rapidly well-known among tourists through public relations (PR) in several channels which make them successful. It is forwards marketing. It is important to say that PlearnWan market utilizes the Retro Nova marketing concept to create a replica of an authentic market that stimulates new consumer experiences and perceptions. Furthermore, Plern Wan market has becomes a center for studying Thai cultural cores and traditional Thai way of commerce back in 1956 with wood and tin sheet decoration. Put another way, Plern Wan market focuses on selling emotion rather than products. However,

the old fashioned products can still make sales. PlearnWan market has also supported local merchants to let the area in selling thing by concept of PlernWan market, as well as hiring students and disabled people to sell things inside so they earn special income. Moreover, Plern Wan has a policy to reduce and recycle material and preserve the environment and utilities by using 'green boards' –recycled material made by milk bottles in order to reduce the high amount of rubbish. Besides that, they design meal boxes to be made of recycle paper, which is biodegradable and can reduce the amount of using plastic meal boxes.

Thus, the objective of learning the case of PlernWan market here is to draw a SWOT analysis of Plern Wan market. The research entitled "Lifestyles Patterns and Tourist Behaviors in Retro Market" (Bantita, 2013), which surveys satisfaction of 400 tourists towards the seven marketing mixes of Plern Wan market in terms of product, price, place, promotion, people, process and physical evidence, finds that the tourists are most satisfied with the product factor at 4.666 mean scores. It can be elaborated that the Retro Nova concept becomes the new experiences ~~to~~ for the customers in bringing back their old time and old fashioned things to recover their memories. Additionally, creative events i.e. performance arts, a traditional temple fair, an outdoor cinema have become highlighted and distinguished activities that other ancient markets cannot provide. These are relevant to the strength of PlernWan market in creating a replica shop with rare things, including the **Piman PlearnWan** – the glamorous and old-style boutique hotel. Regarding the weakness of PlernWan, some tourists may think about fake emotions together with thematic buildings. It

just looks like a setting that lacks the genuine value. The opportunity for PlernWan is the fact that young people become the main target who can link to other teenagers in the AEC and bring them to visit the place. Meanwhile, there is a lot of competition in the retro market tourism in HuaHin. The rivals include Cicada – a chic art market, SamPunNam – a replica floating market. They are popular among tourists as well.

In regard to the price factor, tourists are quite satisfied with this factor at 3.403 mean scores which is the lowest. It is relevant to the weakness of PlernWan market because it collects an entrance fee, and the prices of food and souvenirs are higher than local markets.

As for the place factor, Plern Wan is located on a highway that is accessible by many means of transportation – public or personal. It also has enough parking areas. The tourists are satisfied with this factor at 4.070 mean scores. It is relevant to its strong point that Plern Wan market is located in Hua Hin district of Prachuap KhiriKhan province which is a tourist destination with several of attractions. However, the weakness of Plern Wan market is its small size that causes the tourists to spend little time, while taking photographs at some point within the market requires that the tourists queue up for a long time. These make some aging tourists bored to get in. Another problem is that the place does not provide enough road signs to indicate its entrance.

In regards to the promotion factor, the tourists are satisfied with this factor at 4.282 mean scores in terms of occasional events such as Loy Krathong, and Songkran Festival. To elaborate, Plern Wan market has strategic marketing to use several kinds of social media, PR on internet, the product placement with a tie-in program; all these marketing media reach its target group well. Furthermore, the Retro Market tourism has becomes a new trend among Thai teenagers who respond well in terms of travelling, giving and sharing a word of mouth.

In terms of the people factor, Plern Wan market has well-trained officers to offer services and answer questions politely. Moreover, merchants and local people are kind and helpful. Thus, the satisfaction with this factor is at 3.685 mean scores. This is relevant to the fact that Plern Warn has its officers get dressed in old-fashioned clothes in order to create an ancient atmosphere to perfectly take tourists back to the old days.

Regarding the process, Plern Wan market has got convenient facilities and event programs like an outdoor cinema of which the schedule is provided on its website. Thus, the tourists are satisfied with this factor at 3.429 mean scores although it provides facilities to facilitate the disabled. The last factor is physical evidence. The research finding shows that the tourists are satisfied with this factor at 4.275 mean scores. This is relevant to the strength of Plern Wan market's unique selling point that it is a two-story old-fashioned building seemingly made of wood and tin sheets.
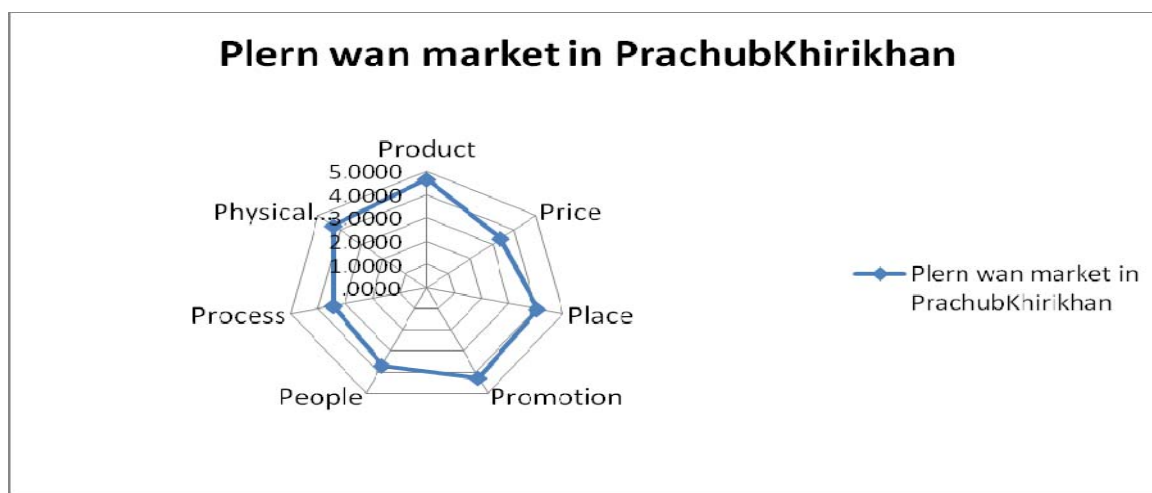
Exhibit 2: the spider web of 7 Ps in marketing mixes of Plern Wan Market

Following the SWOT analyses above, the second objective of both case studies is to explore the relationships between lifestyle patterns and the tourists' experience with both markets. Based on Bantita (2013)'s research, the research asks tourists to give their opinions towards their experience at Ampawa floating Market and Plern Wan Market. This is to check the correlation between their life styles and the markets. Their experiences with both markets are classified into five groups of lifestyles patterns i.e. cultural orientation, societal orientation, entertainment orientation, home and family orientation and sports and outdoor orientation. The finding reveals that only the sports an outdoor orientation lifestyle pattern significantly correlate with Ampawa floating Market at the 0.05 level; meanwhile, other lifestyle patterns show no significance in the correlation with both Ampawa floating market and PlernWan market at the 0.05 level. However, it is important to note that those tourists who prefer the home and family lifestyle pattern are likely to visit both Ampawa floating market and Plern Wan market.

The Lifestyles Patterns (Choose more than 1 choice)	Retro Retro			Retro Nova		
	Ampawa Market			PlearnWan Market		
	N	Percentage %	Sig. (2-sided)	N	Percentage %	Sig. (2-sided)
1).Cultural Orientation	69	68.3%	0.470	46	45.5%	0.126
2).Societal Orientation	22	56.4%	0.289	9	23.1%	0.380
3).Entertainment Orientation	75	67.6%	0.559	45	40.5%	0.732
4).Home and family Orientation	105	70.0%	0.129	63	42.0%	0.343
5).Sport an outdoor Orientation	29	74.4%	0.022	18	46.2%	0.388

Conclusion of the case study

At present, both Ampawa floating market and PlernWan market present their identities clearly through their products and services. For example, Ampawa floating market is uniquely positioning itself as an evening market that presents the life of simplicity along the river and traditional Thai ways of life that make people long for the past. On the other hand, PlearnWan market is a replica of an authentic market that stimulates new consumer experiences and perceptions by means of bringing back old things and presents them in new ways. It emphasizes its image on being a live museum of the 60s, 70s and 80s. Plern Wan market employs the Retro Nova distinctively by creating the value of nostalgic feeling to make up new experiences of for tourists. These two case studies show the suitable application of the retro marketing strategies; the Retro Retro Strategy and the Retro Nova Strategy that create advantage competitiveness in Retro market tourism. These strategies under the Creative Economy show that the key factor of success here is the build-up of "local value". In order for the retro market tourism in Thailand to succeed, what need to exist are the local value, creativity, and the maintenance of the local identity. These factors help highlight the retro market itself as well as attracting tourists nationwide and from around the world.

Reference

Bantita Thubprateep (2013) Lifestyle Patterns and Tourist Behaviors in Retro Market. MBA Thesis of Business Administration Faculty, Mahanakorn University of Technology.

Chodechai Suwanaporn. (2013) A Creative Economy for Thailand: a dream or reality? Retrieve from http://www.nationmultimedia.com/opinion/A-creative-economy-for-Thailand-a-dream-or-reality-30200770.html Search on 5 August, 2013

Creative Economy Special report. (2012) Creative Economy: The power of new driven in Thai economy and society. Retrieve from http://www.nesdb.go.th/Default.aspx?tabid=362 Search on 4 June,2013.

Danai Chanchaochay (2552) Back to the past… Marketing Globalization Retrieve from http://www.brandage.com Search on 14 June,2013.

Karadee Leophiroj. (2555) Creative Economy "Vietnam" Retrieve from http://eureka.bangkokbiznews.com/detail/477621 Search on 14 June,2013.

The Office of national Economic and Social Development Board and TCDC. (2552). The Creative Economy. B.C.Press (BoonChin)ltd.

Warakorn Samkotzeath, (2553) The lecture documents on Creative Economy: Chantaburi Retrieve from http://gems.chanthaburi.buu.ac.th/documents/article/12.pdf on 14 June,2013.

Pattaya Public Transportation for Future Tourism: Is Baht Bus a Solution?

Wuttigrai Ngamsirijit[1]

It had long been known that Pattaya was not just an ordinary tourism destination, but one with a colorful history as well. The main "rest and rehabilitation" venue for American soldiers and sailors during the Vietnam War era, when American ships made regular calls at the nearby Sattahip headquarters port of the Royal Thai Navy, the city had mushroomed from the small fishing village of the early-1960s into one of Thailand's major tourist attractions by the 1990s. Accompanying such dramatic growth had been increased numbers of hotels and resort facilities, houses and condominiums, shopping malls, entertainment establishments, and of course residents and tourists – all of which had begun by the first decade of the twenty-first century to cause severe strains on the city's transportation infrastructure. Thus, as the mayor of the city and other city officials strove to modernize and position their tourist haven for the ever-increasing numbers of tourists visiting Pattaya each year, inbound tourism logistics had become a city planning issue of increasing urgency.

Accompanying Pattaya's rapid development population "explosion," particularly after the year 2000, had been many attempts to improve the tourism infrastructure through revamping and upgrading the transportation grid, with the so-called baht bus having often been assigned a central role, at least *initially*. However, despite these periodic episodes of intense focus on the baht bus as a proposed major element of such plans, most of the attempted projects had ended up as mere appendages to, or minor elements of, other transportation modes that were proposed and pursued simultaneously. Further, with a diversity of views about the role of the baht bus in the overall transportation mix (i.e., some suggesting that it be discarded, while others argued for its improvement), implementation of earlier visions of the baht bus' role had become increasingly fractionated and diluted. Consequently, only minor improvements in the baht bus component of the plan were ever implemented. Moreover, earlier-planned *major* improvements in the baht bus component of

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envisioned transport improvements (such as schemes to limit traffic volume and baht bus routes, and implementation of bus service substitutes) had fallen by the wayside almost from the moment of their design, as they encountered resistance to change from entrenched forces.

Now, however, in the aftermath of the 2010 Pattaya Tourism Development Plan that had been collaboratively developed by Pattaya city hall and the Thailand Tourism Authority (TOT), the role of the baht bus in Pattaya's vision of sustainable and creative tourism was once again being resurrected and discussed, along with what many viewed as a promising new approach to urban transport design, "Demand Responsive Transportation." It remained to be determined whether this latest drive for a coherent and integrated system would, like its predecessor plans, be short-lived or sustained to the point that a Demand Responsive Transportation system with the baht bus at its core would become an integral component of Pattaya's solution to the inbound logistics problem.

Pattaya Baht Bus Transportation Infrastructure and Operations

Pattaya -- unlike the country's major metropolises (e.g., Bangkok, Chiang Mai, etc.) – had never developed a fleet of municipal buses as the core of its public transportation system. Rather, apart from personally owned or hired automobiles, local residents and tourists alike had long moved about the city *via* mostly taxis (of the motorbike and, more recently, vehicle variety), vans, and "baht buses" (also called "baht taxis"). The latter mode of intra-city transport, baht buses – "*rot-song-taew*" in Thai (meaning, literally, "a car with two row seats") – had been a prominent feature of Pattaya's streets and sois since its emergence from its fishing village days of the 1950s and 1960s. It was invariably less expensive than vehicle taxis and most vans, often nearly price-competitive with motorcycle taxis, and in the view of many considerably less dangerous than was getting around the city riding pillion on a motorcycle taxi.

Overview of the Pattaya Baht Bus System

The city had a total of some 700 buses organized into 5 baht bus lines. (In Table 1 below, the five lines and their vehicle capacities are shown.) Changes in the number of lines and other adjustments required the involvement of the Ministry of Transport, which reviewed all such requests and assessed the appropriateness of, for example, a proposed new route before granting its permission. The Bali Hai Pier – Banglamung District Office had been the most recent route to established and approved by the Ministry. Despite this involvement, the Ministry of Transport played a mostly supportive rolein that primary authority, with responsibility remaining with the Transport Authorities Office, Ministry of Transport.

Table 1: Vehicle capacities of the five baht bus lines

Line no.	Name	Distance (Km.)	Quantity (Vehicle)
5	Chareonrat Pattana villege-Na Jomtien	29	187-340
6	City Circle	16	187-340
6079	Na Klua - Siam Country Club	19.3	10-12
7	North Pattaya - Central Pattaya	23	14-20
4	Bali Hai Pier - Banglamung District Office	10	10-12

*The Na Klua-Siam Country Club baht bus line currently had minimal passenger demand.

The owners of the approximately 700 baht buses were required to be members of the Pattaya Bus Cooperative established by Pattaya city and operated along designated routes around the heart of Pattaya. The work paid relatively well, with many drivers able to earn up to 50,000 baht per month from operating along *ad hoc* routes to specific tourist attractions, especially for shopping purposes.

Baht buses were strictly required to follow the promulgated rules and regulations governing various aspects of the buses' operations. Some of those rules pertained to misconduct of various types by bus operators. For example, the Pattaya Bus Cooperative had recently established new regulations specifying sanctions for misbehaving baht bus drivers and car rental owners. For violating the regulation specifying that red- and yellow-stamped buses must operate on alternate days on certain streets (especially Pattaya Beach Road, where disorderly bus parking had greatly increased the congestion), the penalty was set at 100 baht. The specified penalty for over-charging of fares and for abandonment of passengers at inappropriate destinations was a 500 baht fine. Inappropriate dress or rude behavior subjected the offending driver to a 200 baht fine. Recurrent offenses resulted in a 3- to 7-day suspension from their routes, while previously convicted offenders who refused to change their behavior could be altogether severed from the system.

In terms of transport regulation, small buses operating on designated routes were obliged to run from 8.30 to at least 16.30. However, because of both the largenumber of tourists and the fact that baht buses were independent operators, not municipal employees or contractors, drivers could freely drive and pick up passengers pretty much as they pleased. As a result, vehicle routes were overlapping, and vehicles were overcrowded on the main routes – largely in consequence of baht bus service being responsive to passenger volumes and travel needs, even though in redundancy.

On every baht bus, there were attachments containing a breakdown of fares based on distance traveled. There were also feedback forms in Thai and English, along with hotline numbers for use in contacting officials able to assist in any kind of travel difficulty.

Some Key Aspects of Baht Bus Operations

In terms of micro views and of what mattered from a "systems perspective," the way the baht bus operated could be described as one of its main attractions. That is, along with the usually more expensive vans and taxis, it was a "non-fixed-route" mode of transportation that enabled baht buses to be more flexible in terms of changes in passenger demand. Responding to the needs of passengers *via* increased flexibility on a given route was currently done by either (a) allocating a higher proportion of vehicles to areas with a high density of tourists and tourist attractions (only a minority of vehicles operated around the city), or (b) picking up passengers and charging them a special group fare.

Further, although a *permanent* change in routes required the approval of the Ministry of Transportation, adjustments could be and, often were, informally effected <u>within</u> routes. That is, baht bus drivers adjusted the routes when they believed there were too many vehicles on a particular route, resulting in too many unoccupied passenger seats. Routes could also be adjusted when the Cooperative became concerned about the service level in certain areas, e.g., if the number of passengers had recently increased. Some routes were temporarily established to serve passengers and then later terminated when the need no longer existed.

In the absence of careful system-wide vehicle allocation and planning, a potential downside to the temporary adjustment of routes to serve changing demand was additional traffic congestion. This was because when a new route was formed to meet passenger needs, old routes were not terminated, but rather remained in operation. This was deemed one of the contributing factors to the situation in which, outside of peak-demand time, most baht buses ran empty, or nearly so, much of the time.

A majority of baht buses were operated along and in the vicinity of the beach where the large number of tourists translated to high travel demand. In fact, whenever there was a backup on Beach Road at night, it was often because of a long line of baht buses bogging down the left lane, as they waited for tourists and other passengers.

While a baht bus typically operated based on four designated fixed routes,not all routes could fulfill the travel needs and travel volumes of Pattaya tourists. In fact, operating in this manner tended to result in an excessive number of baht buses. Thus, baht bus drives gravitated toward operating in an*ad-hoc* manner, e.g., by not driving their full route. That is, rather than proceeding from the start to the end of the route and then reversing direction and proceeding from route end to route start, baht bus drivers would reverse direction at some intermediate point along their routes. In addition, in practice, baht bus did not always operate within each designated route. For example, itwas not unusual to see baht buses that had been assigned to Pattaya circle routes appearing on the North Pattaya-Central Pattaya route.

Transfer points located around the intersection of major roadsenabled drivers to easily change direction from the current route to others when the current route had too few (or no) passengers. Transfer points could thus help reduce risk from demand uncertainty. However, it was believed that this approach also contributed to traffic congestion on the main streets, especially during the peak periods.

New road networks (including over- and underpasses) and baht bus routes in the city were periodically constructed and/or reconfigured in the attempt to mitigate traffic congestion. However, Pattaya'sstreet construction endeavors had now essentially reached their limit. This reality, coupled with the strong voice of residents requesting a resolution of increased traffic congestion in the city, made it imperative that bath bus operations be improved in such a manner that they could become a solution for, instead of a contributor to, the growing congestion problem.

Select Developments in Baht Bus History in Pattaya

Earlier, in 2003, several private companies, in pursuit of what at the time seemed to them like a good business opportunity, had established their own bus services, featuring air-conditioned buses. However, their vehicles were in operation for a short period before ceasing their services due to their expensive fares, extended waiting hours, and limited bus stops. Meanwhile, the baht bus -- although by no means the most elegant or comfortable mode of getting about Pattaya -- survived this brief competitive challenge with complete aplomb, largely because it had the virtue of being flexible, convenient and inexpensive.

Nonetheless, in 2006, as a kind of quality alternative to the rather uncomfortable baht buses, Pattaya City launched an air-conditioned microbus service with scheduled stops along designated bus routescoveringPattaya, Naklua and Jomtien Beach. This service, quickly dubbed the "Pattaya Beach Bus," initially consisted of three lines, serviced by coaches in three different colours -- Red, Green and Yellow -- to make it easy for passengers to identify the lines. (Bus stops along the routes were also colour-coded and numbered, so that the passengers knew where to board and disembark.) These modern microbuses could seat up to 30 people and charged a flat rate of 30 Baht for a one-way ride, regardless of how far a passenger traveled. The buses, all of which originated from the Big C Supercenter/Sukhumvit branch, ran from 6am to 2 am.

Alas, by early 2008, only a few buses of the microbus Red Line could still be spotted, occasionally; and by mid-2011, the Pattaya Beach Bus project had fully come to an end. The effort to establish an inner-city, air-conditioned bus service had totally failed. Some attributed the failure to the reluctance of passengers to stand in line. *"People were still familiar with the way they [could] hop on and hop off freely along the [baht bus] route; they did seem not willing to wait in line,"* asserted the head of traffic research at Pattaya city hall. *"Furthermore, baht bus drivers also drove [up]and pulled over their vehicles in a way [that] blocked the bus driving lane."*

Meanwhile, traffic congestion throughout the city continued to worsen. To address the problem, some knowledgeable observers averred that it would be helpful if the number of baht buses were reduced by half. However, given that such an action would have deprived 350 baht bus drivers of their source of livelihood, few actually believed that city leaders would ever attempt such a remedy. Thus, remaining to be worked out was the question of how to properly operate the baht bus under the special characteristics and conditions of PattayaCity, and in a manner that would help alleviate the growing congestion problem.

Select Blogs from Tourists

From a tourist perspective, there continued to be a number of vexing issues concerning the ubiquitous, blue-colored baht buses that plied the city's streets and sois. That these modes of transport had not been entirely satisfactory to many of them was evident from a perusal of some of the more common tourist complaints and feedback, some of which could be viewed on local public blog sites. Allegations of fare over-charging were not uncommon, despite the statement from Chonburi Transportation Authorities Office that ". . .

the regular fare of mini bus in Pattaya is not over 10 baht per person according to the law of enforcement by the department of land transport' . . . ."

Further, while it was the city's most convenient form of transport, most foreign tourists had no previous experience with the baht bus and frequently found the process of getting from one part of town to another by baht bus frustrating and often bewildering. Commented one blogger on a Pattaya public blog site: *". . . tourists at first are a little afraid to ride the baht bus, because they just don't know how it works. . . . If the driver should change from your expected routing, it may be necessary to get off, pay and then catch another baht bus going the direction you want to travel."* The prospect of having to embark and then disembark from multiple baht buses before reaching their intended destination – all the while being unsure whether the *next* baht bus would in fact take them all the way to their final destination -- was sometimes disconcerting to tourists, whose home-country intra-city travel experiences were likely to have been less fraught with "guess work" and spur-of-the-moment route changes while *en route*. These experiences had led one blogger to warn tourist: *" . . .[D]on't try it unless you know the price . . . . [The song-taew system is a little confusing. I was there with a local and [had a] problem getting around. . . . I still have yet to figure out the system to date . . . ."*

Despite the ongoing complaints about baht bus service and operations, and notwithstanding the fact that earlier ambitious plans for the baht bus' role in the future transportation infrastructure had come to naught, the idea of the *potential* of the baht bus to help solve Pattaya's inbound tourism logistics conundrum was slowly being revived. One reason for the longevity of this idea was that the baht bus seemed to fit the residential living style of most inhabitants of the city and, with changes, might even succeed in better meeting the transport needs of larger numbers of tourists, just as the popular "tuktuk" mode of transportation had accomplished in some other Thai cities.

Additionally, there was real question in the minds of the Pattaya mayor, Mr. IttipolKhunpleum, and the head of the Chonburi Transportation Authority as to whether any core transportation infrastructure for the city could be developed in the absence of the baht bus having a prominent role. In any case, all were in agreement that without a greatly improved and integrated core infrastructure (whether or not that incorporated the baht bus), tourism in the city was bound to suffer, as would Pattaya's hope of becoming a modern, urbanized beach city. One had but to review Pattaya's explosive growth and development to appreciate why.

Pattaya: Past, Present, and Projected Future

As a prime tourist destination, with most of its 31 local communities having been transformed into providers of tourism services and facilities after years of successful tourism development, Pattaya by the year 2000 had become a magnet drawing people from all regions of the country, as well as from foreign countries, to live and work in the city. Basic information concerning the size, number and density of population in the city during 2000-2010 are shown in Table 2 below. As can be seen, both the population and population density of Pattaya expanded dramatically in the decade from 2000 to 2010.

Table 2: Population in Pattaya City during 2000-2010

Year	Total population	Male	Female	Total household
2000	82,133	40,127	42,006	14,192
2001	85,533	41,606	43,927	14,827
2002	89,413	43,123	46,290	15,445
2003	92,878	44,716	48,162	16,088
2004	91,855	43,812	48,043	16,992
2005	96,654	45,799	50,855	17,963
2006	98,992	46,828	52,164	18,436
2007	102,612	48,438	54,174	18,948
2008	104,797	49,241	55,556	19,326
2009	106,214	49,589	56,625	19,702
2010	107,406	50,075	57,331	19,900

Source: Office of the Pattaya City Manager

The travel industry was by far the most important economic activity of the city, with about 87 percent of the working population engaged in either trading or providing services for the tourism industry. At approximately 270,000 baht of *per capita* income per year, Pattaya residents enjoyed a standard of living higher than most cities of its size in Thailand – a status that continued to make it an attractive employment and business destination for Thais from other areas of the country.

As revealed in several recent outlook reports, it was a foregone conclusion that Pattaya would continue to grow at a fast clip. This was confirmed by way of a number of growth-inducing factors and trends. For example, there were the sheer numbers of new residential and commercial development projects both under way and planned, e.g., the construction of a marina and the nearby Royal Varuna Yacht Club.

Further, with respect to residential developments, the average number of units per project continued to increase, surpassing 2010 numbers. This was largely the result of several large scale projects, totaling more than 1,000 units, that had been launched in 2011. The 2012 condominium market continued to grow, albeit with a lower number of newly-launched units. However, there had been some shifts from the 1990s when Pattayaitself had been the most popular zone for condominium development. From 2001 onwards, the Jomtien area had shown faster growth due to its larger amount of land for potential development, as well as the new condominium projects that were launched in the aftermath of the Pattaya City Administration Office's 2005 initiation of development of JomtienSai 2 Road, which ran parallel to the beachfront road and was close by Jomtien Beach. Additionally, the 9,000 condominium units already in the pipeline for completion during 2012-2015 in Pratumnak area would be higher than in any other area. Figure 1 shows the growth in the number of condominium room units in key Pattaya areas during the years 1990 through 2011.
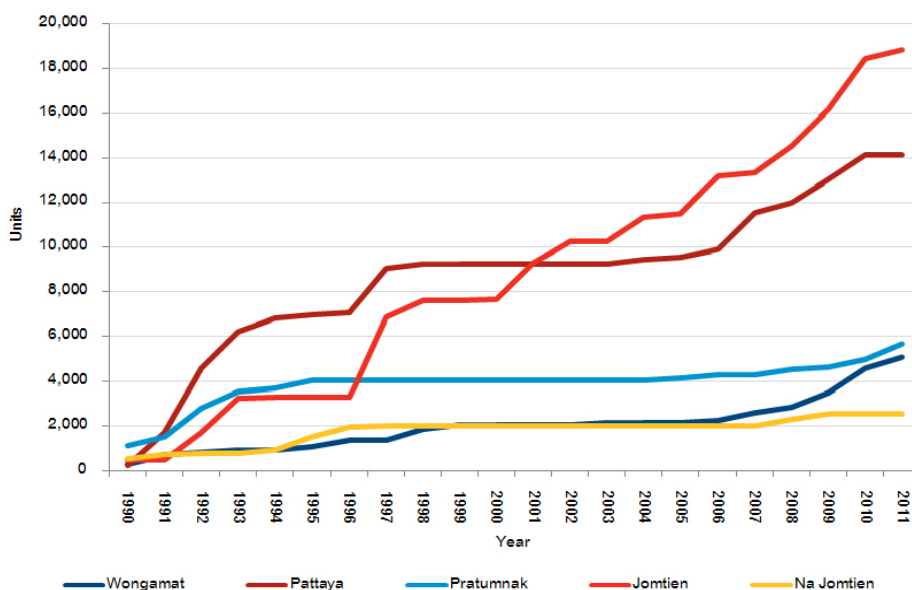
Figure 1: Number of condominium room units in key Pattaya areas, 1990-2011
Source: www.colliers.co.th

Further confirmation of Pattaya's continuation along a path of rapid growth could be found in the fact that South Pattaya was fast becoming the city's most prestigious and valuable real estate and in the fact that rental yields in Pattaya were actually higher than those in Bangkok. Some developments in the city had long waiting lists and realized rental yields of around 6-8 percent, compared to around 4 per cent in Bangkok. The ever-increasing number of tourists visiting the city each year – some from countries of origin not earlier well represented in the tourist mix – also signaled an ever-expanding base of potential customers for the new condominium developments. Indian visitors, for example had significantly increased their presence, rocketing almost eight-fold from 300,000 in 2011 to a projected two million by 2013.

Evident trends in tourism also pointed to a continuing economic boom in Pattaya. A number of incubating factors were behind increasing tourist numbers – including, the development of new roads, new attractions, and new investments. Removal of the limitation of supply of transport would only further propel the trend.

Vision for Pattaya City

The initial development of guidelines for sustainable tourism development in Pattaya city had started with the vision for new city image as *"New Pattaya: The World Class Greenovative Tourism City,"* with the concomitant application of the *3 R's* by which the vision was to be attained. The *3 R's* were to (1) Rebrand (2) Revitalize and Develop Facilities and (3) Raising Capacity and Capability.[1]

Tourism and Transportation Development in Pattaya

The new vision for Pattaya City encompassed both a tourism and transportation component. For the vision to be realized, both components would need to work in synchronization with each other.

Tourism Development Plan

By the year 2000, Pattaya's economic lifeline, heretofore based on the nightlife-based tourism and a majority of Western tourists using English as the *lingua franca*, had been significantly transformed. Thailand's increased economic growth -- along with the influences of in-migrating entrepreneurs, investors, immigrants, and tourists – had dramatically changed the face of the city. From that year onward, a casual observer perched in the heart of the city was as likely to see an Indian IT professional as a Middle Eastern family, or a Russian couple or members of a Chinese tour group. Pattaya had now blossomed into a broad mixture of residents, tourists, and tourists-turn-residents with an effusion of urbanized lifestyles.[2]

Tourism development itself began to undergo a similar transformation, as city leaders, motivated largely by concerns about social and environmental problems generated by the consumption-driven materialism that often accompanied mass tourism, shifted the focus to tourism *sustainability*. Rising complaints about waste water and other pollution management issues had made the headlines from time to time, leading to calls for a different paradigm for tourism development. Thus, in collaboration with the Thailand Tourism Authority (TOT) and Pattaya city hall, the 2010 tourism development plan focused on sustainable and creative tourism schemes as the main strategic thrusts of the city's future tourism development endeavors. To this end, four development themeswere set as follows:

1. Eco-tourism: to preserve marine nature areas with beautiful coral reefs around the island.

2. Improvement of tourism capacities in all areas of Pattaya municipality and partial areas of Jomtien municipality.

3. Promotion of cultural tourism in areas of special interest – including the city's eastern and southern sides. To accomplish this, the city center was to be linked to this area by abus transportation network covering HuaiYai, Pattaya, and Jomtien.

4. Preservation of such natural resources as water and forests; promoting local agricultural products; and, developing areas with low density and large plots of land.

Transportation Development Plan.

The Master Plan for the development of transportation embraced the concept of "*sustainable transport systems*" and included various transportation projects:

- Development of a transportation system directly linking the airport and the city;
- Development of a high speed (250 km/hour) rail line linking Bangkok, Pattaya, and Rayong, along with an express train linking three cities; and,
- Development of a highway connection between Pattaya and Mabtaput

In addition to the government's focus on the creation of an efficient public transport system connecting Pattaya to other cities and transport facilities, there was also recognition in the Plan of the need to improve the transport system *within* the city. This was in concert with the aim of the Tourism Development portion of the overall plan, henceforth, to diversify Pattaya tourism beyond the traditional attractions of nightlife entertainment and to promote local features such as sport, nature and culture. Such tourism development would necessarily entail the development of additional clusters of tourism facilities outside of the entertainment-based businesses of central Pattaya, which themselves were only a part of the 38 available tourist attractions in and close by municipal center (see Table 3 below). There were another 12 places with development potential outside the city center (see attractions 39 through 50 below).

TABLE 3: List of Tourist Attractions in and around Pattaya City

	Tourist attractions in city				Tourist attractions outside city
1	Pattaya water park	20	Pattaya Pirom Submarine	39	Khao Cheechan Buddha Image
2	Bottle museum	21	Wongphrachan beach	40	Wat Yan Sang Wararam
3	The Sanctury of Truth	22	Elephant Garden	41	Nong Nooch Garden and Resort
4	Mini Siam	23	Super Kart Racing	42	The Million Years Stone Park and Pattaya Crocodile Farm
5	Pattaya beach	24	Monster World	43	Elephant Villege Pattaya
6	Wongamat beach	25	Tuxedo Magic Castle	44	Three Kingdoms Park
7	Jomtien beach	26	Siriphon Orchid Farm	45	The Horseshoe Point Resort Pattaya
8	Koh Lan	27	Paintball Park and Bungee Jump	46	Sriracha Tiger Zoo
9	Mabprachan reservior	28	Snake Show	47	Khao Kheow Open Zoo
10	Point of View Pattaya	29	N S P Snake Show	48	Bira International Circuit
11	Suan Chaloemphrakiat	30	Pattaya Airpark	49	Pattaya Flying Club
12	Pattaya Kart Speedway	31	Lakeland Water and Cable Ski	50	Silver Lake Vineyard
13	Wang Sam Sien	32	S K Pattaya Ranch		
14	Khomluang Chumpon Khet Udomsak Monument	33	Chang Siam		
15	Viharnra Sien	34	Elephants Trekking		
16	Underwater World	35	Wonderland Pattaya		
17	Ripley's Believe It or Not! museum	36	Easy Kart		
18	Sukhawadee	37	Pattaya Floating Market		
19	Khao Phratamnak	38	Pattaya Circus		

Source: Tourism Authority of Thailand

It was understood that this component of the tourism development plan would be a challenge in terms of enabling transportation arrangements. There was evidence that few tourists ever visited most of the sites on the list, either because they did not know of the attractions or because they did not know how to get to them. Apart from the beaches, public transportation including baht buses in Pattaya mainly served the municipal core where an abundance of restaurants, shops and entertainment facilities were located. Direct transport to the attractions further away from the city center was possible only by privately hired vehicles and taxis or vans. Baht buses took tourists only to the nearest place on the main road, from which tourists had to transit to the attractions of interest by motorcycle taxi or even by walking.

Many local officials were acutely aware that for the master plan for future Pattaya tourism to be viable, transport facilities within the city – but especially to and from tourist sites outside the city – would have to be upgraded and expanded. To this end, with the recent boom in tourist arrivals, several initiatives to reduce the ever-worsening traffic congestion had resulted in a number of city projects that sought to take into account various aspects of development including economics, tourism, logistics, welfare, and well-being. Four projects of special note included:

- The renewal of Pattaya Beach Bus Service serving the Pattaya Floating Market, Jomtien, the Second Road, and Pattaya proper;

- The *designated baht bus stop* projectwhereby 12 bus stops were created to pre-cludepassenger-dictated ones, thuseasing congestion and improving safety;

- The Pattaya Monorail project, which was expected to help decongest intra-city travel by offering tourists a comfortable commute around the resort on a monorail as early as 2014; and,

- The *parking without worrying and moving safely* project – a parking service center for cars and boats, aimed at greater tourist travel comfort and safety.

If these projects, along with others under consideration, produced the desired results, they would go a long way toward alleviating the City's traffic congestion. In addition, some transportation planning officials believed that they might well facilitate and complement a new "Demand Responsive Transportation" system for Pattaya.

<u>Demand Responsive Transportation</u>

Demand Responsive Transportation (DRT) was an approach to the delivery of transportation services that had been developed in the so-called "first world" nations to enable service providers to better respond to passenger needs. The adoption of DRT was supposed to reduce the waiting time problem resulting from various transportation system constraints and limitations. As such, it was of more than passing interest to Pattayacity hall.As shown in Figure 2 below, there were several key characteristics of demand responsive transportation.

Route	Fixed months in advance			→	Fixed 1 hour before trip
Vehicle	Limited period of availability			→	Long periods of availability
	1 type			→	Many types
Operator	Commercial	→	Competitive tender	→	Selected 1 hour before trip
Passenger	Special transport services	→	General public only	→	No restriction
Payment	Pay on vehicle	→	Season ticket	→	Smart card

Low demand responsiveness ⟶ High demand responsiveness

Figure 2: Key Characteristics of Demand Responsive Transportation

Essentially, by combining techniques for capacity management and dynamic scheduling, the DRT enabled vehicle allocation by taking into account available service capabilities at specific times, as well as travel needs based upon the request of individual passengers. As such, the DRT transportation system was deemed suitable for areas with specific requirements such as areas with fluctuating tourism demand. Moreover, tourism areas with a low density of tourists could also benefit from DRT when travel demand was low but with periodic upward spikes.

A major reason why the possibility of a DRT-based system was attractive under certain conditions had to with comparative operating costs. More specifically, the operating costs of traditional public transportation were high compared to DRT when travel demand was low because fixed route buses had to pass every stop regardless of the number of passengers onboard. But, when demand was high, offsetting this advantage of a DRT-based system was the fact that the costs of operating a DRT system were relatively high due to higher cost of the larger vehicle fleet required to be able to respond passenger service demands. The various degrees of responsiveness for each type of transport is shown in Table 4 below.

Table 4: Types of Transport Classified by Degree of Responsiveness

Registered bus options	Non-registered bus options	Taxi Options	Car Options
Post bus	**Restricted user education transport***	Single operator shared ride taxi	Wheels to work
Non-restricted user education transport	Shoppers' bus	Multi operator shared ride taxi	Social car scheme
Fixed route*	Care services		Car pool
Semi-fixed DRT	**Patient transport service***		Car club
Flexible area DRT	Community transport	**Single ride taxi***	**Private car***

Source: Mulley, C. and Nelson, J.D. (2009) Flexible transport services: A new market opportunity for public transport, Research in Transportation Economics, Vol. 25, pp. 39-45.

In the Thai context, only a few of the responsive modes of transport shown in the Table above were available – mainly in the form of private cars, single-ride taxis, restricted-user education transport, and patient transport services. The only bus option available was that of the fixed-route bus. Thus, transportation responsiveness in Thailand was mainly in the form of taxi and car options, a fact that contributed greatly to traffic congestion in the capital city and in major tourism cities like Pattaya.

The responsiveness of the existing baht bus service for tourism was still not adequate for purposes of a Demand Responsive Transportation system. Mostly, baht bus operated in designated routes, with service still not covering all tourist attractions and with often relatively long walking distances for tourists from the main street to the attractions. The service was responsive when baht bus routes directly passed the attractions and passengers were able to select their various routes for traveling, and did not have to walk in distances to and from the attractions. However, only 14 attractions (i.e., 36.8%) of the 38 primary onesshown in Table 3met those criteria.

For Pattaya, the viability of Demand Responsive Transportation could be assessed by examining its operating costs. As DRT operated a semi-fixed route service, it was variable costs -- i.e.**,** costs occurring when vehicles travel to pick up passengers who request them at a specific time and location --that were most germane to DRT decisions. DRT also had additional costs,i.e., "penalty costs," that did not enter the picture of fixed-route service. "Penalty costs" arose due to the inability of the vehicles to respond within the time and distance parameters requested by passengers. The idea was to keep penalty costs as low as possible when operating DRT.

Distance Rate (DR) -- the ratio of total variable costs and total service distances -- could be used as one of the measures to evaluate DRT viability. A simulation of DR value for DRT service showed that Bali Hi Pier-Banglamung District Office line had the highest DR (DR = 1.098), followed by Pattaya Circle line (DR = 1.078), Chareonratpattana village-Na Jomtienline (DR = 1.077), and North Pattaya-Central Pattayaline (DR = 1.069). Comparison of the DR of *conventional* baht bus and *DRT* baht bus revealed thatthe DR value for DRT service was decreased by 2.99%, 3.06%, 2.73%, and 3.18% for Bali Hi Pier-Banglamung District Office line, Pattaya Circle line, Chareonratpattana village-Na Jomtienline, and North Pattaya-Central Pattaya line, respectively. This reflected the differences in DRT utilization on each baht bus line.

Penalty costs were highest for the North Pattaya-Central Pattayaline. In descending order with respect to penalty costs, Pattaya Circle, Bali Hi Pier-Banglamung District Office line, and Chareonratpattana village-Na Jomtienline had had the next highest penalty costs. This finding revealed that operating DRT on different routes did not yield the same results. Instead, the characteristics of logistics requirements of the line also played an important role in DRT decisions. Table 5below contains a summary of the results of a simulation analysis of DRT viability.

Table 5: DRT Viability Measures and Results from Simulation Analysis

Costs	Baht bus line			
	ChareonratPattana	**Pattaya Circle**	**North-Central Pattaya**	**Bali Hi Pier**
Penalty costs	207.74 (4)	212.69 (2)	237.73 (1)	210.10 (3)
Variable costs ofDRT	1.107 (3)	1.112 (2)	1.104 (4)	1.132 (1)
DRT utilization	2.73% (4)	3.06% (2)	3.18% (1)	2.99% (3)

Note: The number in parentheses connotes rank.

These then were some of the main considerations that had to be taken into account in pursuing a transportation development incorporating DRT, as a complement to the new strategic vision and plan for tourism development in Pattaya. How the baht bus would fit in the scheme remained to be decided. But, several organizational entities would have input in the decision.

Key Organizational Influences on the Pattaya Transportation System

Four principal entities were entitled to input into whatever decisions were ultimately taken concerning thePattaya's evolving transportation network, including the role of the baht bus in Pattaya's future transportation system. First was the Pattaya Police Department, which was in charge of managing traffic flow, implementing traffic regulations, and securing the civilians and tourists when traveling in the city. Second was the Chonburi Transportation Authority Office, which was responsible for vehicle route design and arrangement, vehicle registration, and national transportation policy implementation. Third was Pattaya City Hall, which had authority to initiate, develop, and improve the transportation infrastructure of the city. The final entity was the Pattaya Transport Cooperative, which operated the baht buses in designated routes around the city.

According to one of the transport professionals inPattaya city hall, "… *They[transportation solution conflicts and failure of transportation projects]are due [to the fact that that there are] no specific authorities for them. In the end, [the] transportation system was . . . performed with little [and] loose control…*"

Over the years, many "solutions" for improvement of transportation system effectiveness had been proffered by nearly all of the multiple stakeholders of the transport system. Among the aforementioned stakeholders on the supply side (e.g., Pattaya city hall,baht bus owners and drivers, etc.) and demand side (e.g., residents, tourists, owners of entertainment facilities) of the equation, there were those who tended to focus on transportation system benefits instead of value creation from the system. For example, drivers and owners of baht buses typically came forth wielding their bargaining power on the city whenever there were transportation improvement projects, bus service projects in particular. They were quite afraid of losing any of the benefits to which they had grown accustomed. In this connection, their umbrella association, thePattaya Transport Cooperative, invariably threw its support to its members and withheld support for projects to which the members objected. They could, and did, however throw their support behind projects that clearly

served their self-interest – e.g., the city's proposal to arrest and charge any unregistered and counterfeit baht buses.

Additionally, other stakeholders, while perhaps well-meaning in the application of rules and regulations concerning the areas of their authority and responsibility, sometimes came up with "remedies" that *other* stakeholders felt made life more difficult. A case in point: To better organize the flow of traffic in the heart of the city, the Pattaya Police Department made PattayaSai 2, the main path to Beach Road, a one-way street. The result was a deceleration of traffic flow due tothe sheer number of buses headed to the Beach Road, but unable to approach it from either direction. In essence, theone-way traffic on Beach Road and PattayaSai 2 acted like a "*roundabout*"created by an imbalance of incoming and outgoing vehicles, with the former being greater than the latter.Baht bus responsiveness also suffered, as drivers now had to make a detour before being able to proceed in another direction around the city.

Faced with the earlier limited success and outright failure of many projects, solving Pattaya's resolve traffic problems, especially in its main streets, had been long in coming. With continually emerging new requirements and constraints, the design and development of Pattaya transportation system were getting tougher and harder to accomplish with each passing year, with no obvious resolution yet in sight. The mayor, amidst constraints such as limitations of city space, mix of residents and tourists, and residential lifestyle, had to select an appropriate system from among several options for city transportation. And, this had to be accomplished while also bringing together all transport networks to facilitate travel; the city park buildings and related services; monorail transportation system to link the network to the destination for the convenience and benefits of tourists in the future; and, a responsive inbound transportation system within city. As he reflected on magnitude of the challenge before the city of Pattaya, the mayor wondered whether the city's inbound logistics could be alleviated, in whole or in part, through application of a *demand responsive transportation* ("DRT") approach.

Next Move: All Come Together

In a renewed earnest attempt to find a solution to Pattaya's inbound transportation logistics issue, working groups had been formed to maximize prospects of finding solutions that would be acceptable to all stakeholders in the city's transportation equation. Pattaya city hall was more determined to succeed than ever, now that it had become obvious that fragmented solutions could not improve overall transport system operations and logistics of the city. Theywas hoping that this time there would be nobody, especially the baht bus, to blame for the city's traffic congestion and related problems. Of necessity, this effort had to not only involve entities such as the four earlier-mentioned organizations having input into transport decisions, but also require changing attitudes towards planning and implementation of expected transport solutions in a more collaborative and integrativemanner.

Finally, Demand Responsive Transportation (DRT) was not something that could be designed by considering only the "big picture." Rather, if the city was to move in the direction of pursuing a DRT approach to public transportation, it would need to do so with a foundation of clear information about, and a clear understanding of, both the macro and micro sides of both supply and demand. Whether the newly composed working groups could work collaboratively on problem solving and thereby come up with the design of a new transportation system that would facilitate the city's pursuit of the vision of becoming a city of "sustainable tourism" was an open question.

Endnotes:

1. In 2003, under the former ThaksinShinawatra administration, "Designated Area for Sustainable Tourism Administration" (DASTA) was established. DASTA was set up as a public organization, with the roles and responsibilities over sustainable tourism operation, through coordination for integrated administration of areas with valuable tourism resources, with more flexibility and promptness in operation than that of government agencies and state enterprises, as an important driving force in the administration of the country's tourism industry both in short and long terms. Pattaya city's administrators had been pushing for the move to reclassify Pattaya and its surrounds in 2008. DASTA approved the application in 2009, allowing Pattaya city to swallow eight municipalities for sustainable tourism. They were the Municipality of Pong Sub-District, the Municipality of Na ChomThian Sub-District, the Municipality of Bang Lamung Sub-District, the Municipality of Takhian Tia Sub-District, the Municipality of HuaiYai Sub-District, the Municipality of NongPrue, the Tambon Administrative Organization of Khao Mai Kaeo, and the Tambon Administrative Organization of NongPla Lai.

   The 15 billion baht "Greenovative Tourism" city plan earmarked 132 projects, including developing transportation and tourist attractions. It aimed to declare Pattaya a green and clean city in 10 years. But cleaning up the streets of Pattaya involved more than just new buses and painting beach benches. The issues of local vice and foreign criminals living in Pattaya need to be addressed. Greenovative plan also needed to take into account reducing vice if Pattaya was to meet its tourism goals. One way to achieve this was to have a stronger police presence on the streets. Nevertheless, MrItthiphol said the city did not have any plans to address the problem of foreign criminals and added the current annual budget was adequate.

   One of policies under the 3R's was designated as "Mobility Traffic of Pattaya City". It was broken down into the following temporally based focal points:

   Short-term
   - Solving road transport problems systematically and concretely.
   - Shortening the queue by using Area Traffic Control (ATC). "No matter how many cars were, the traffic was still fast".
   - Providing security for all people with traffic lights.
   - Focusing on "service" as the key to traffic work.

<u>Medium-term</u>
- Carrying on underway development on Sukhumvit Road and Central Pattaya intersection according to the study of the needs of Pattaya citizens.
- Providing direct flight to OuTapao Airport to reach the Pattaya beach in 30 minutes.

<u>Long-term</u>
- Developing and enhancing transportation pooling and networking.

2. In particular, the massive increase in the number of Russians and Eastern Europeans had ushered in some heretofore unprecedented changes. With their arrival came the opening of a number of venues at the far end of Walking Street, a major commercial thoroughfare, that catered specifically to Russians and where signs were only in Russian, with nothing in either English or Thai. More and more venues -- from massage outlets, to restaurants, to hotels – had signs in English, Thai *and* Russian. Consequently, the social conditions in Pattaya became as complex as they were varied. In walking along a street and asking for directions, a visitor no longer needed to ask a local person, as a foreign person whom he might encounter and who had actually lived here in Pattaya for a long time was just as likely to be able to provide a helpful answer.

Income, Saving and Wealth of Thai Rural Households: The Case Study of Saving Inadequacy[1]

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Abstract:

This paper investigates saving and wealth of rural households with an emphasis on the issue of saving inadequacy. We use the household survey conducted by the National Statistical Office in the year 1999 as database; first, we hypothesize an interrelationship between income, saving, and asset and, later on, estimate the relationship by an econometric technique from which the predicted saving over life-cycle is examined. Our findings indicate that: (i) approximately 29 percent of rural households overspent their income—not only that this groups failed to save, they incurred negative saving, and (ii) 47 percent of rural households saved inadequately according to "weak definition". We compare probabilities of saving inadequacy by age-cohorts, occupations, and educational levels. The last section discusses long-term implication of saving inadequacy and limitation of our model for further improvement.

Key Words: income, saving, wealth, saving inadequacy, socio-economic factors, rural household, Thailand

Introduction

The concerns over the rise of consumerism and indebtedness are continually raised in Thai newspapers with worrying note that if a significant portion of our people overspend or save inadequately (Pootrakul, 2005); what would happen to our elderly population without adequate saving given an increasing proportion of aged population. Some commentators have gone far to suggest that it may be timely for the central bank to tighten control over consumer credit. We are of an opinion that the issue of saving inadequacy should be first closely examined, and especially those families who overspent their income or could save but little. We chose to limit a scope of study to rural households for the reasons that, from preliminary data observation, an incidence of indebtedness is higher in the rural area, and the greater proportion of rural workers are self-employed or informally employed without social

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security, they seem to more vulnerable to income fluctuations than the formal and urban workers.

This paper hypothesizes an interrelationship between income, saving, and asset of the rural households and empirically tests the relation by econometric model from which we calculate the probabilities of saving inadequacy. The term 'saving inadequacy' needs some clarification: We propose two indicators as proxy: first, a strong definition which refers to an inability to save, more precisely, an overspending; the second concept to be referred as a weak definition means that the saving amount is inadequate or too little to cope with risk and uncertainty in the future. According to the "Self-Sufficient Philosophy" all families should develop an immunity (which in our context refers to saving as risk-coping mechanism). We suggest an operational definition of inadequacy by creating a dummy variable = 1 if the actual saving amount less than 50% of the predicted saving amount by our model (where S_i depends on socio-economic factors such as income, occupation, education attainment, number of children, regional dummies, urban/rural, etc.)

Our paper is organized into 5 sections. In Section II, after an introduction, a brief review of the life-cycle model of saving and an extended model that allows for parental altruistic attitude toward offspring and the role of intergenerational bequest. Section III explains the database and terminologies (measurement of saving and saving inadequacy), and, later on, the comparative statistics by age cohorts, occupations, and educational attainments prior to an econometric estimate. Section IV discusses weakness in our measurement and complexity of an issue and section V a conclusion.

The Model

This study adopts the life-cycle model of saving as framework (Modigliani 1956, 1988) with an extension by assuming that parents are, in general, altruistic toward their children and they have good intention to bequeath asset for their beloved children. The basic life-cycle model of saving assumes that a representative individual is rational and his/her life span is divided into 3 periods (being young and not working, adult and active in work, and living in retirement). While a person is actively working, he or she must plan to save part of income (Y) in the form of saving (S) and accumulated into stock of asset (A). Asset has multiple functions and important role for family—asset can be withdrawn for consumption or investment in the future and possesses option value.   In a simple model with self-interest motive, a person plans to spend all of his/her asset at end of life. The model implicitly assumes that a representative person plans a saving according to maximized life-time utility function which, in practice, is questionable whether he or she actually behave as such and he or she has perfect foresight as to longevity. And making bold assumptions such as he or she commands knowledge of life-time income stream and spending needs in the future which are questionable in practice.

Our approach adopts an extended version of the life-cycle model by assuming parental altruism toward their offspring (and vice versa children are altruistic toward their parents as well). Becker and Tomes (1979) introduce the concept of "dynastic utility" in which the well-being of children (born or unborn) is part of parents' utilities. Parents would like to pass on asset to offspring through bequest (B) and human capital bequest (H). Unlike the self-interest parents, the altruistic parents do not deplete accumulated assets at end of life. A bequest or human capital bequest yields parents' utilities.

We follow an extended life cycle model by assuming altruistic parents and the dynastic utility as a framework, as such the key variables in our model encompass income (Y), saving (S), asset (A), bequest (B) and human capital bequest (H). By saying that parents are, in general, altruistic toward offspring, does not mean that every parents transfer asset to younger generations -- it is possible that some parents fail to save adequately and hence little or negligible asset is actually transferred. Akerlof (1991) suggests that people can be time-inconsistent, in the sense that he or she realizes the importance of saving and promises to save every month or every day, yet, many people procrastinate an action for tomorrow instead of saving today. A failure to save an promised amount (say x%) is considered a 'minor mistake' – yet if ones procrastinate for a long time, it could be a major mistake.

Empirical Evidences

This section reports our empirical investigation, starts with description of data and clarification of terms (in particular, the meaning of saving and saving adequacy). Household saving is conventionally defined as income subtracted by consumption expenditures. In practice, it is not always clear which expenditure items are consumption and which are not. For instance, should we treat insurance payment as consumption or as investment for the future? In this paper, we shall adopt two definitions of saving. First, "save1" which is defined as household income subtracted by household expense inclusive of insurance payment. Secondly, "save2" which is defined as "save1" plus 2* insurance payment. The latter definition means that an insurance payment is treated as saving rather than consumption.

It is well known that saving is highly influenced by income (Browning and Lusardi 1996) -- yet both income and saving are influenced by cultural factors and varying social settings. We adopt the notion of social dimension of saving and assume that occupations, age cohorts, sexes, educational attainments may be influential to household saving. According to the socio-economic data in 2009 conducted by NSO, the pattern of income, net asset and saving of household in rural area in Thailand can be shown in Figure 1, Figure 2 and Figure 3. Figure 1 shows the relationship between income and age of household head which income increases in early age and diminishes in older age in accordance with life-cycle model. Figure 2 indicates that people do not use asset to smooth consumption in the later life, they may bequeath some asset to their offspring. Figure 3 shows the saving rate which vary by age of household head.

Figure 1: Income and Age of Household Head in Rural Area
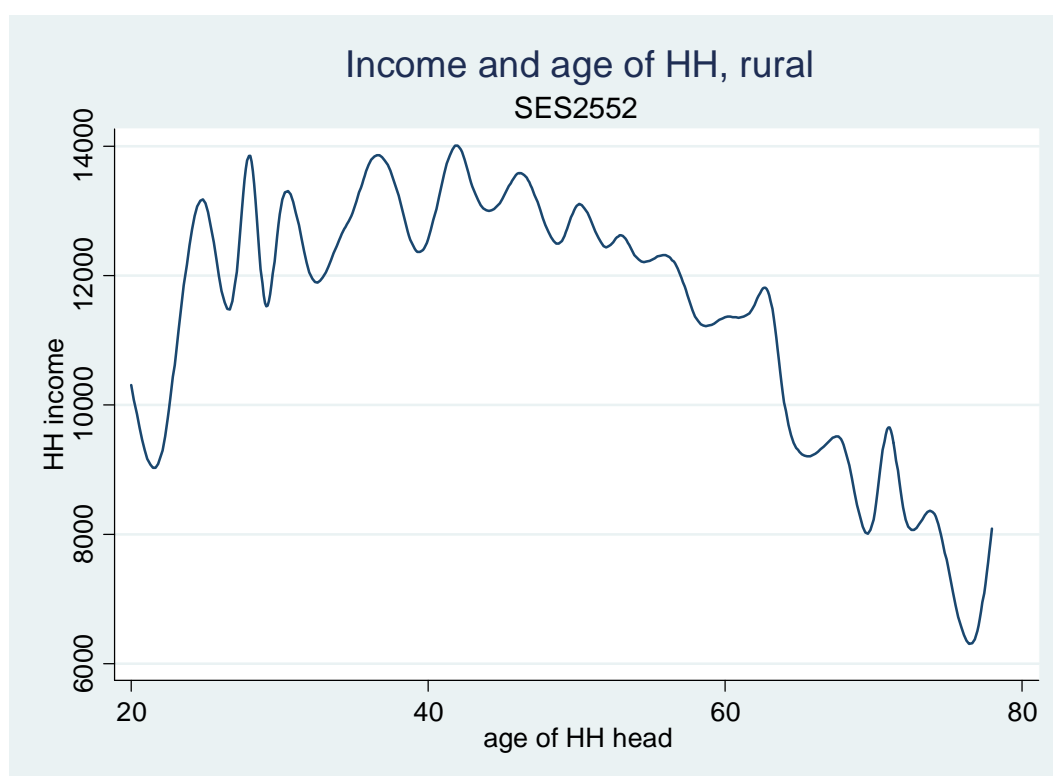
Figure 2: Net Asset and Age of Household Head in Rural Area
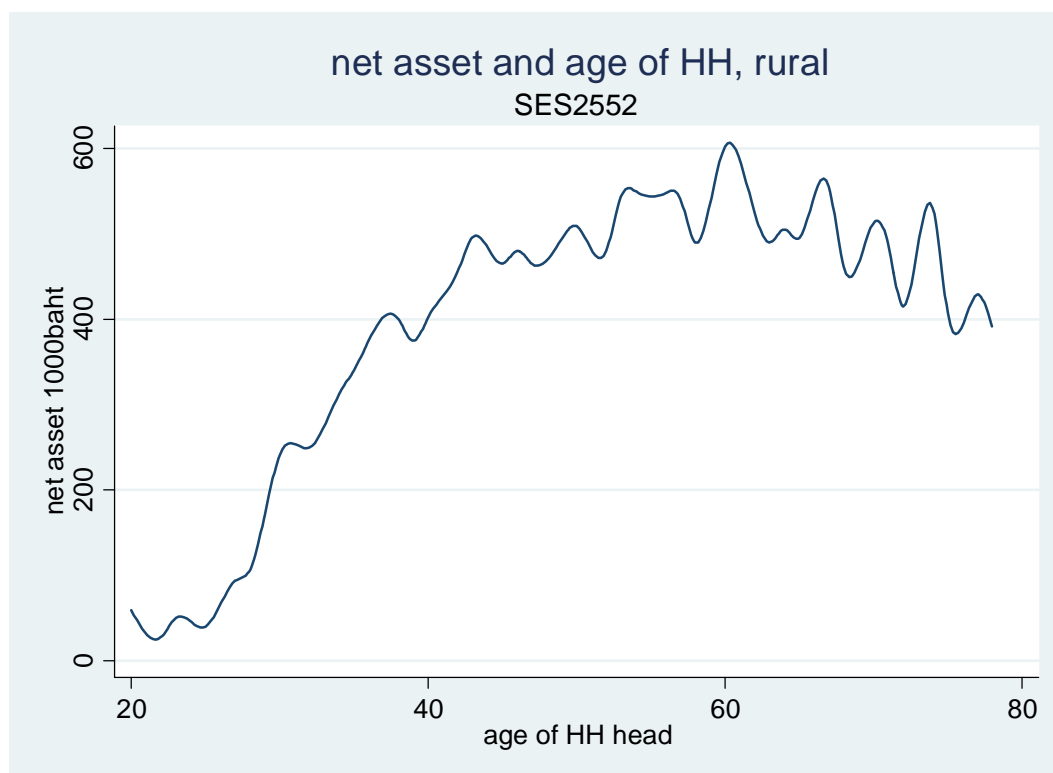
Figure 3: Saving Rate by Age of Household Head
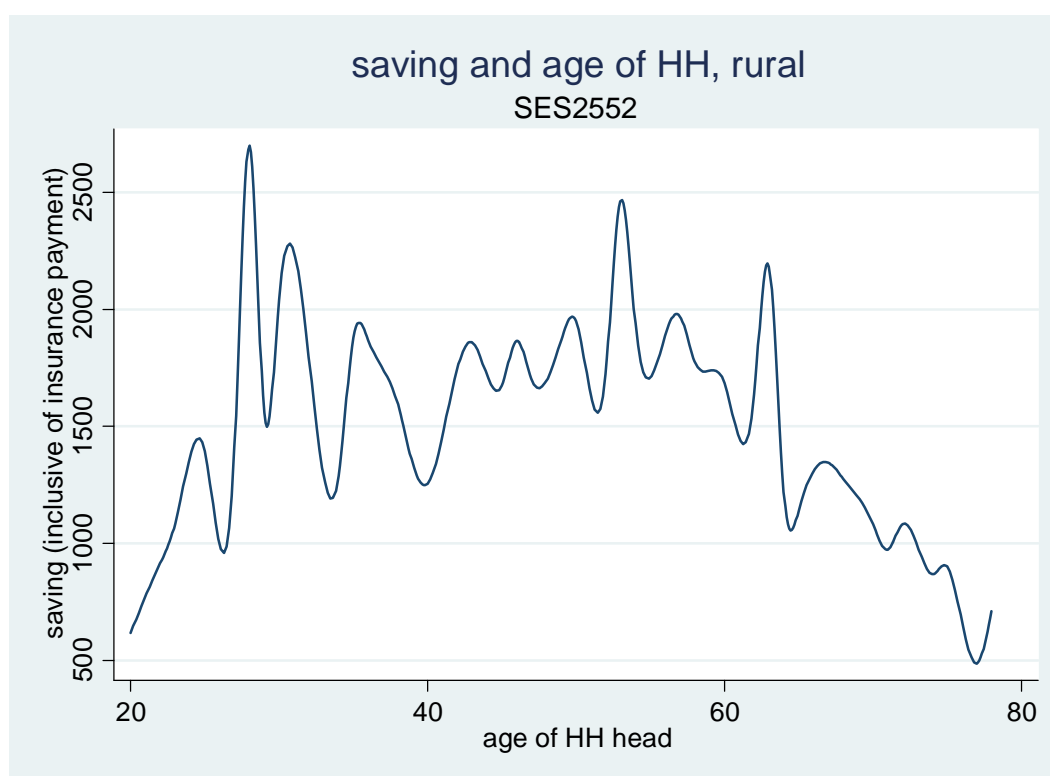
Table 1 displays descriptive statistics for rural household income, wealth and saving (all variables in per capita). The per capita income averaged to 8,188 baht per month and the per capita saving (the second definition) averaged to 2,239 baht per month—these statistics give an impression that rural households could save with a fairly high saving rate (27%). This does not mean that every rural household could save—it is also important to examine how saving is distributed. Saving amounts by percentile are reported in this table. Note that 25 percent of rural households or more not only failed to save, they overspent and incurred negative saving.

Table 1: Descriptive Statistics of Rural Household: Income, Wealth, and Saving

Statistics	per capita Income baht/month	per capita wealth 1000baht	per capita save1 baht/month	per capita save2 baht/month
mean	8,188	401	1,875	2,239
percentiles				
p10	1,901	9	-1,105	-882
p25	2,959	46	-189	-33
p50	5,117	153	548	777
p75	9,343	377	2,026	2,476
p90	16,737	861	5,518	6,196
p99	47,184	4,053	23,906	25,617
Gini coefficient	0.49	0.69	0.69	0.67

Source: NSO's household survey, 2009

Figure 4 displays two kernel density curves for saving (in natural log) and that of income (also in natural log). The magnitude of variations in saving is clearly greater than that of income.

Figure 4 : Kernel Densities for Saving and Income (rural households, 2009)
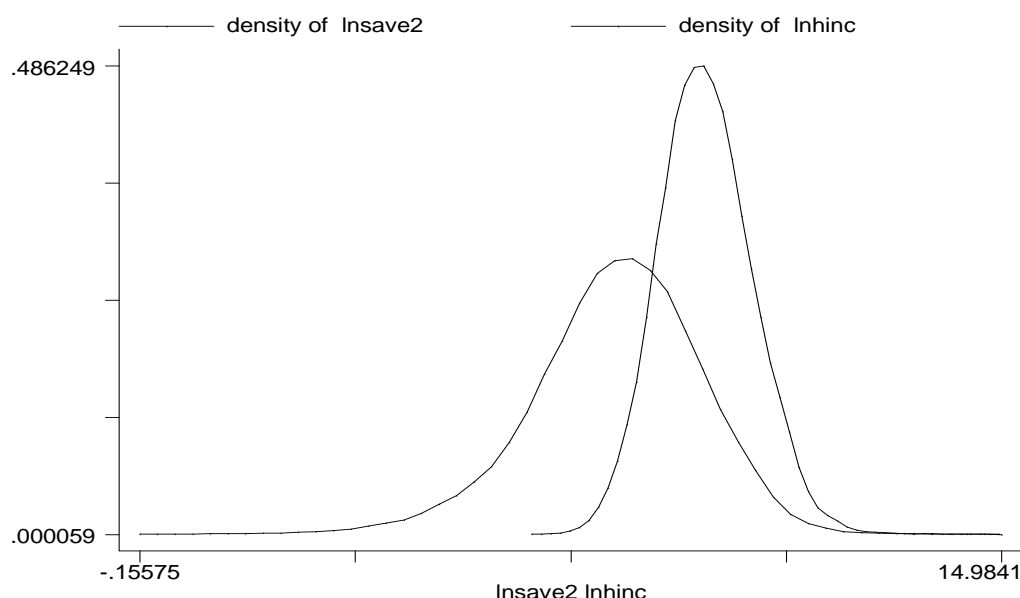
As mention earlier we presume that income, wealth, and saving can be influenced by socio-economic variables such as occupation, educational attainment, or age of household head.   In Table 2 we tabulate distributional statistics of income by occupational groups. According to NSO's, occupations are broadly grouped under 9 categories, and then we chose to regroup them into 7 groups instead.   By comparison, the professional and the technician (2+3) rank on top in income scale with an average income of 38,388 baht per month; at middle level are the executives (1), the clerk (4) and the service worker (5) whose average incomes ranged from 20,000 to 27,000 baht per month; and at the bottom are the agricultural worker (6), the craftsman and factory worker (7+8), and the primary occupations (9).

Table 2: Distribution of Rural Household Income by Occupational Groups

Unit: baht per month

Occupational Group	Mean	Sd	p10	p25	p50	P75	p90
1	27,455	30,764	6,867	11,020	18,403	32,929	56,901
2+3	38,388	25,541	11,685	19,586	33,800	49,163	71,388
4	24,776	17,074	9,671	13,530	19,425	31,517	47,516
5	20,560	19,391	6,536	9,730	15,581	25,325	40,327
6	14,365	14,612	4,190	6,376	10,341	17,201	28,772
7+8	16,518	14,513	6,151	8,944	13,350	20,187	28,904
9	13,185	21,621	3,644	5,541	8,981	15,238	25,192
Average	16,814	20,390	4,444	6,879	11,551	20,018	33,845

Source: NSO's household survey, 2009

Next we explore an association between occupational choices and educational attainment with a presumption that the latter variable might have significant influence on the former so we cross-tabulate the two variables as shown in Table 3. Note that the majority of highly educated household heads (who have college degrees) chose executive, professional, and technician as their occupations. By contrast, a majority of primary educated household heads take agricultural worker and primary occupation. The end of the table provides statistics of association calculated from the cross-tabulation.

Table 3: Tabulation of Occupational Choices and Education Attainment

Unit: number of households

Occupational choice	Primary	Lower secondary	Upper secondary	vocation	Univ_ bachelor	Univ_ Higher	Total
Executive	955	213	186	41	92	33	1,520
Professional	6	3	19	13	246	35	322
Technician	57	29	47	41	73	6	253
Clerk	33	24	55	30	48	1	191
service work	682	162	162	43	50	0	1,099
agricultural work	5,111	810	274	50	35	1	6,281
Craft	962	199	85	48	9	0	1,303
factory work	460	182	129	30	5	0	806
basic occupation	3,744	980	170	50	71	1	5,016
Total	12,010	2,602	1,127	346	629	77	16,791
Pearson chi2(40)	=	8,300.0	Pr	=	0.00		
likelihood-ratio	=	3,800.0	Pr	=	0.00		
Cramér's V	=	0.31					
Gamma	=	-0.21	ASE	=	0.01		
Kendall's tau-b	=	-0.13	ASE	=	0.01		

Source: NSO's household survey, 2009

Table 4 reports the estimates for the structural equations in which income (Y), saving (S) and net asset (asset – debt) are treated as dependent variables and assumed to be influenced by the set of explanatory variables. We chose a seemingly unrelated regression (SUR) as the method on ground that their error terms might be contemporaneous correlated.

Table 4: The Estimates for Structural Equations

Variable	Seemingly Unrelated Regression	Meaning of Variable
Eq1:income **Hinc**		
Earner	5096.9339 33.29	number of earner
Age	666.0314 9.28	age
Agesq	-5.3249 -7.99	age squared
Yred	2128.6195 31.15	year of education
_Iocc1_2	2746.23 2.8	professional
_Iocc1_3	-5017.6303 -3.49	technician
_Iocc1_4	-4428.8046 -5.97	clerk
_Iocc1_5	-9405.1385 -17.09	service worker
_Iocc1_6	-6736.0616 -10.57	agricultural or general worker
_Iocc1_7	-5184.7761 -8.69	craft
_Ireg_2	4471.8038 11.25	central
_Ireg_3	(omitted)	north
_Ireg_4	-1490.2705 -3.55	northeast
_Ireg_5	5448.3492 11.23	south
_cons	-23122.397 -10.85	constant term

Eq2: household saving		
Save2		
Hinc	0.6105	household income
	148.25	
ch014	-901.0042	number of children age 0-14
	-9.61	
Age	-12.7965	age of household head
	-0.32	
Agesq	0.6538	age squared
	1.79	
Ownh	620.5849	own home: dummy
	2	
Female	88.3961	female household head
	0.48	
_cons	-7574.0142	constant term
	-7.49	
Eq3: Net asset		
Assetnett		
Size	50.7798	number of family member
	5.47	
save2	0.0213	save2
	24.84	
_Iedu1_2	143.6558	lower-secondary
	2.72	
_Iedu1_3	231.6755	upper-secondary
	4.06	
_Iedu1_4	41.9103	vocational
	0.42	
_Iedu1_5	418.3478	univ_bachelor
	5.53	
_Iedu1_6	-136.6735	univ_higher
	-0.65	
_cons	565.7822	constant term
	15.63	
Statistics		
N	15520	
Log likelihood	-479125.853	
Chi-squares		
Eq1	4093.24	
Eq2	22120.72	
Eq3	754.63	
R2		
Eq1	0.1964	
Eq2	0.6146	
Eq3	0.0385	

Source: NSO's household survey, 2009

Most of the estimated parameters (in positive or negative direction) conform to prior expectations.   Just to mention few aspects of relationship of our interest: (a) household income is significantly influenced by years of education, number of family earner, occupation dummies, and regional dummies; (b) household saving varies positively with income, and negatively with the number of children (age 0-14); (c) the net asset of household is positively related to saving, family size, and educational dummies. Regarding the goodness-of-fit statistics, The R-squared for the second equation (saving) equal to 0.61 which is fairly high. Note that the R-squared for the first and the third equations are low (0.2 and 0.04) – the authors are of an opinion that this opens room for further improvement in model estimation and specification.

We retrieved the predicted values of saving for individual households as reference. By a 'weak' definition of saving inadequacy we mean that a person or a household could save (saving amount > 0) but that amount may be inadequate for long-term future (i.e., consumption smoothing in retirement). Remind that the saving amounts vary individually according to age cohorts, occupations, and educational attainments. We define an operational definition of saving inadequacy in dummy = 1 if the actual saving amount less than 50% of the predicted saving amount. For illustration, if a particular household is supposed to save 5,000 baht per month (according our estimated model) but actually save 2,000 baht per month—this household could save but failed the test of saving inadequacy; otherwise the dummy is 0.

Another definition of 'strong' measure of saving inadequacy refers to those households who not only fail to save--in fact they overspent their income. The authors would like to note that our dummy 0/1 can be temporal—the fact that a dummy is recorded as 1 does not imply that this household would overspend all the times. Our measurement is only true at the time, i.e., if dummy=1 for a particular household according to the survey taken in January 2009—it might be the case that one of family member happened to get sick—had we continued to repeat the sample in the next month (February 2009) the dummy might be 0.   In other words our dummies (0 or 1) could be permanent or temporary—in fact, it is interesting to take further decompose the dummies into two components, permanent and temporary. The NSO samples can be traced by month of sampling but it is unfortunate that the sampled households are not repeated over time.

Tables 5-8 display the cross-tabulation of saving inadequacy versus income groups, age cohorts, occupations, and educational attainments to trace similarity or dissimilarity by categories. Table 5 confirms the negative correlation between income levels and the probability of saving inadequacy. Note that saving inadequacy exists for every income categories yet such incidence are very high among the low-income families (2,501 to 5,000 baht per month) and the probability of incidence are lowered in higher income families.

Table 5: Probability of Saving Inadequacy by Income Groups

Income	Saving Inadequacy in Rural Area		
baht/month	Frequency	Strong Definition	Weak Definition
2,500	*377*	0.75	0.86
5,000	*1,845*	0.53	0.70
7,500	*2,644*	0.45	0.63
10,000	*2,290*	0.36	0.53
20,000	*5,435*	0.22	0.41
50,000	*3,479*	0.11	0.29
100,000	*605*	0.04	0.17
over100,000	*116*	0.03	0.16
Average	*16,791*	*0.29*	*0.47*

Source: NSO's household survey 2009 and the authors' estimates.

We examine the association between age cohorts and saving inadequacy as displayed in Table 6. It appear that the probability of overspending (strong definition) in young families (age of household heads below 40 year old) is higher than the elder household heads. Note also dissimilarity between the strong inadequacy and the weak inadequacy in this table. According to our estimates, the higher percentage of elderly cohorts that could save but too little (i.e., weak definition) has a tendency to rise over age cohorts. We are not claim to know the reasons why but speculate that as household member are advancing in age, health expenses may increase due to poor health and higher demand for health care or the need for elderly care. We realize that our model has weakness in the sense that health status is assumed to be 'exogenous' whereas in fact they are endogenous and that it may be a sensible to expand the model to explicitly include consumption behaviors (where aging play role in explaining health care expenses)

Table 6: Probability of Saving Inadequacy by Age Cohorts

Age Cohort	Saving inadequacy in rural area		
	Frequency	Strong Definition	Weak Definition
<29	*668*	0.31	0.47
30-39	*2,334*	0.32	0.43
40-49	*4,290*	0.31	0.43
50-59	*4,204*	0.28	0.42
60-69	*2,812*	0.28	0.51
70-79	*1,869*	0.29	0.60
80 & over	*614*	0.25	0.63
Total	*16,791*	*0.29*	*0.47*

Source: NSO's household survey 2009 and the authors' estimates.

In Table 7 tabulates probabilities of saving inadequacy by occupations (grouped under 7 categories). Probabilities of saving inadequacy are observed in all occupations, yet, the incidences vary from one occupation to another in particular, those of agricultural workers and primary occupations are on the high side whereas the professional occupation on the low end.

Table 7: Probability of Saving Inadequacy by Occupations

Occupational	Saving Inadequacy in Rural Area		
Group	Frequency	Strong Definition	Weak Definition
Executive	*1,520*	0.25	0.35
Professional	*322*	0.08	0.17
Technician	*253*	0.15	0.24
Clerk	*191*	0.15	0.30
service worker	*1,099*	0.25	0.40
agr/gen workers	*6,281*	0.36	0.48
Craft	*1,303*	0.24	0.39
factory worker	*806*	0.22	0.36
primary occupations	*5,016*	0.29	0.59
Total	*16,791*	*0.29*	*0.47*

Source: NSO's household survey 2009 and the authors' estimates.

In table 8 reports an incidence of saving inadequacy by educational attainment. It is not surprising to note that the percentage of lowly-educated household heads that failed to pass the test of saving adequacy is higher. This reminds us the concept of relative risk. Among the low income earners, an unexpected reduction in income or an unexpected increase in expenditure by x baht, the relative risk is large. If such incidence should happen to the high income earners, the relative risk is moderate or little. In contrast the percentage of household heads who earn college degree that failed to pass the test (of saving adequacy) is less.

Table 8: Probability of Saving Inadequacy by Educational Levels

Educational	Saving Inadequacy in Rural Area		
Attainment	Frequency	Strong Definition	Weak Definition
Primary	*12,010*	0.31	0.49
Lower-secondary	*2,602*	0.28	0.47
Upper-secondary	*1,127*	0.25	0.42
Vocational	*346*	0.19	0.40
Univ_bachelor	*629*	0.14	0.30
Univ_higher	*77*	0.08	0.16
Total	*16,791*	*0.29*	*0.47*

Source: NSO's household survey 2009 and the authors' estimates.

Discussion and Policy Implication

We realize complexity of an issue and difficulty in measuring saving inadequacy. The 'weak' definition of saving inadequacy is a debatable topic and some may comment that we are making bold assumption. We cannot claim to be a precise definition. It could be the case that our predicted value (of saving) is overestimated, and the actual saving amount of the sample is 'normal' – yet, the dummy is 1 which reads 'saving inadequately'. We merely assert that it is necessary to generate an operational definition of saving inadequacy and that we are at experimental state; we wish other researchers will experiment with other notions or try different measurements.

The Thai society is moving toward "aging" as in many advanced countries, the proportion of elderly is already over 10 percent and is likely to reach 20 percent in about a decade from today. From the lifecycle model and a rational assumption, people should increase saving given longer life-expectancy. Yet, in practice many people do not save adequately or procrastinate their actions. A research led by Lusardi (2008) in United States point out the decline of saving among American people and recommend propagation of financial literacy as mean to overcome saving slump. Our study is but a modest attempt to trace "what it is", i.e., saving behaviors among the rural households and to get a sense of interrelationship between income, saving, and asset. We suggest that our measurement of saving inadequacy (although imprecisely) as warning signal for Thai people in general. The *self-sufficiency philosophy* suggests that everyone should be 'moderate' and 'reasonable' in their ways of living and should develop an 'immunity' as instrument to cope with future risk and uncertainty. We are of an opinion that saving is a core element in immunity. It is timely and worth undertaking to raising peoples' awareness regarding saving adequately.

Conclusion

The authors investigate the relationship between income, saving, and wealth with special reference to problems of 'saving inadequacy'. We draw upon the household survey by the National Statistical Office conducted in 2009 as database. Our simple structural model assumes income, saving, and net asset as dependent variables and that they are explained by a set of variables that include socio-economic characteristics. The predicted values of saving are used as the reference for estimating incidence of saving inadequacy—the strong definition and the weak definition. Our findings indicate that: i) 29 percent rural households (from the total 16,791 samples) overspent their income and incurred negative saving; ii) 47 percent could save but too little or inadequately. The "Self-Sufficiency" Philosophy recommends that all households should develop an immunity (against risk and uncertainty) which in our context "to save adequately". We assert two operational definitions of saving inadequacy as "preliminary" measures. We realize the complexity of an issue—yet, the measurements (however its imprecision) may serve as a warning signal for public at large and for public agencies in charge of financial policy.

Reference

Akerlof, George A.1991. Procrastination and obedience. *American Economic Review*, 81: 1-19.

Becker, G. and N. Tomes.1979. An equilibrium theory of the distribution of income and intergenerational mobility. *Journal of Political Economy*, 87: 1153-89.

Browning, M., & Lusardi, A. (1996) "Household saving: Micro theories and micro facts", *Journal of Economic Literature*, 34(4), 1797–1855.

Lusardi, Annamari ed. 2008. Overcoming the Saving Slump, Chicago: University of Chicago Press.

Modigliani, Franco 1988. The role of intergenerational transfers and life cycle saving in the accumulation of wealth. *Journal of Economic Perspectives*, 2: 15-40.

Pootrakul, Kobsak et.al. 2005. Long term saving in Thailand: are we saving enough and what are the risks? A paper presented at the Bank of Thailand Annual Conference 2005, Bangkok.

Disequalizing Equalization Transfers:

Politics of Intergovernmental Transfers in Khon Kaen Province*

Achakorn Wongpreedee
Tatchalerm Sudhipongpracha

On his first day in office, Mayor *Lek* sat enthralled by the congratulatory homage from his municipal administrator, department heads, and municipal workers. The mayoral election in *Ban Khor* was long and arduous, but the electoral victory came as a surprise to *Lek* who, prior to swearing in as *Ban Khor*'s mayor, had only worked in the agricultural sector. His dairy farm is the largest in *Ban Khor*, in terms of both the land area and cattle number. Until today, it remained a mystery how an ordinary farmer—albeit a wealthy one—could have toppled an incumbent mayor who had been occupying the mayoral seat since *Ban Khor* municipality was a sanitary district. The previous mayor had all to win the election: his vote-canvassing network, his connection with the *Khon Kaen* province's Member of Parliament (MP), and his full control of the municipal administrative mechanisms. Granted, even though *Lek* had more money than his competitor, it was not his monetary endowment that altered the electoral momentum in his favor. It was his campaign policy to bring running water to a majority of *Ban Khor* residents who had to travel 20 kilometers each day to *Khon Kaen*'s extravagant downtown to get water for daily use and consumption.

Prior to his first day as mayor, Lek thought it was as easy as falling off a log to bring running water to his home community. He had multiple plans to realize his election-winning policy. First, since he was an excellent essayist throughout his high school and college years, *Lek* would write a grant proposal and submit it to the Ministry of Interior. He was confident that the central government officials would definitely be astounded by his impeccable writing skill. Second, even if the first plan was a total failure, *Lek* could also instruct the Finance Department to prepare a cost-benefit analysis of the running water system and give a complete report to some private bank in downtown *Khon Kaen* for loan consideration. Third, in case the borrowing option was implausible, *Lek* has an alternative plan to discuss with the Provincial Waterworks Authority (PWA) about his fellow *Ban Khor* residents' inconvenience.

Mayor *Lek*'s "first 100 days" ended on his first day in office. After the congratulatory fanfare in the morning, *Lek* met with the municipal administrator and department heads in an informal meeting to craft a preliminary implementation plan for his running-water-for-all policy. *Lek* was in a shock to learn about his municipality's financial status, especially the debt level. Some of the high-echelon officials frankly opined that none of *Lek*'s strategies would work. *Lek*'s first plan was a complete joke to his bureaucratic subordinates who had witnessed the country's transition from a centralized decision-making polity to a "superficially" decentralized governance system. Academic merits did not carry that much weight in the Thai central bureaucratic context. In the past, a local government grant proposal was successful, not because it was beautifully written and logically sound, but because it was handed over to the Ministry of Interior by a prominent national politician. The other two options were also unlikely to get the *Ban Khor* residents anything. The municipal government's debt level was exorbitantly high. However, even if *Lek* insisted on borrowing to finance his running water project, he still had to ask for approval from the interior ministry. About the Provincial Waterworks Authority, the previous mayor pleaded with the PWA director many times several years ago, but to no avail.

As if there were not enough despair and depression in the meeting room, *Boon Chuay,* the municipal government administrator who had served in *Ban Khor* for almost a decade, imparted the news that he was scheduled to begin his new position in another town next week. *Lek* was silent after listening to *Boon Chuay*'s farewell statement. Perplexed and overwhelmed by all the caveats about pursuing his election campaign policy, *Lek* adjourned the meeting and was the first person to leave the municipal building. He needed time to ponder over his future as *Ban Khor*'s municipal leader and was surely in dire need for some good political advice to proceed with his flagship policy.

OVERVIEW OF THAILAND'S LOCAL GOVERNANCE LANDSCAPE

Throughout the 20th century, Thailand's administrative structures had pronounced centralization features. Policy formulation, planning, budget allocation, and personnel management were determined at the national level. In other words, every aspect of government decision making that has bindings effects on people from all walks of life occurred at the ministerial headquarters in Bangkok. Each ministry's provincial and district agencies in which officials were appointed by Bangkok were responsible for executing the central government policies, programs, and directives. With the centripetal administrative forces, provincial residents were merely subjects who were perceived by the Bangkok officials to be uneducated and unfit to govern themselves.

The Emergence of Leviathan: Evolution of Modern Thailand as a Centralized Bureaucratic State

In the early 20th century, the Bangkok elites embraced the Western European administrative principles to tighten their control over the vast territory of Thailand—known then as Siam. The traditional administrative structure modeled after the Khmer-Brahmin theology was replaced with a Weberian bureaucracy, resulting in the formation of Western-style ministries and departments to carry out the modern state's functions (Unger 2003; Phongpaichit & Baker, 2005). The structural reform was considered radical, considering that the traditional structure had been in use for almost half a millennium. However, fear of the British and French imperialist invasion convinced the Siamese aristocrats to relentlessly pursue the drastic reform with two ultimate goals of ensuring macroeconomic stability and consolidating territorial control. Consolidation of territorial control was a novelty for the Siamese rulers and their subjects who were more familiar with the fluidity of feudalism and vassalage. It, however, did not take them long to get acclimatized to the novel territorial centralization. In fact, centralism was considered the most effective mechanism to strengthen the Siamese race's political and administrative influence over a large number of ethnic groups. Consequently, all Thai vassal states—such as *Lanna* (the northern kingdom), city states in the northeastern region, and the Malay sultanates—were abolished and replaced by the French-style provincial structure.

The prominent output of the early 20th-century reform was the Ministry of Interior (MOI) that had long been the pivotal thrust of Thai politics and administration. Prior to 2002, the ministry's most powerful administrative apparatus was the Department of Provincial Administration (DOPA) that dominated all provincial gubernatorial appointments. Not only were these centrally appointed governors the most senior MOI official in each province, but other ministries and departments also devolved power to the provincial governors to supervise and control their provincial and district offices.

Paralleling the institutionalization of centralized administrative control, the municipal government system emerged. During their European tour, the late-19th-century Siamese aristocratic leaders became fascinated by the glamour of European cities and, upon their return in Southeast Asia, decided to experiment with local self-government (Langford & Brownsey, 1988). The first form of a local self-governing body that ever surfaced in Thai modern history was a sanitary district *(Sukhaphiban)*. In the first few years of the 20th century, the number of sanitary districts grew exponentially in the semi-urbanized areas, but was confined to Bangkok and Greater Bangkok. Despite the attempt to develop local self-governing capacity, the Siamese reformers restricted the scope of sanitary districts' responsibilities to trash collection, sewage management, and slaughterhouse inspection and licensing. Further strengthening administrative centralization, the sanitary districts were placed under the Department of Provincial Administration's centralized bureaucratic supervision. The chief district officers (*Nai amphoe*) were *ex officio* heads of the *Sukhaphiban* council, enabling them to exert significant influence over these local authorities.

After the fall of absolutism, the Thai parliament passed the Municipality Act in 1933. Municipalities (*Tessaban*) were local government units in the large urban areas. In each municipality, the legislative body was the municipal council elected by district, while the mayor served as chief executive officer and was chosen from the municipal councilors. However, a Thai municipality's scope of activity was limited to providing basic services, such as garbage collection and disposal, water supply slaughterhouses, and markets. Even for this narrow range of functions, the Thai municipalities faced perennially inadequate financial resources. Reflecting the Siamese state's centralizing mentality, the interior ministry's provincial governors had legal authority to inspect and approve the municipal annual plans and budgets. Importantly, the provincial governors could dismiss the municipal councils and *mayors whenever they deemed necessary (Raksasat, 1995).*

Throughout the 20th century, Thailand or Siam was clearly a centralized bureaucratic state in which the central bureaucratic apparatuses led by the interior ministry's provincial administration were deployed to keep people and the local communities on a short leash. Central officials and aristocrats in Bangkok vehemently promoted centralization as a necessary capacity-building step for the local communities, arguing that societal forces at the local level in Thailand were too feeble to ensure effective local self-governance (Raksasat, 1995).

The Specter of Leviathan: Illusion of Decentralization of Power and Authority to the Local Level

Beginning in the 1990s, centralization appeared to give way to decentralization. With increasing levels of urbanism and political awareness among citizens, the pendulum of societal forces swung towards community empowerment and citizen participation in the country's politics and administration. Indeed, the 1990s *zeitgeist* opened the window of opportunity for local people and their leaders to craft the management of their own community affairs.

The 1997 Constitution—widely touted as the "People Constitution"—marked the start of the devolution of decision-making authority away from the central government to the local levels. During the constitutional drafting process, a variety of social groups took part in the process, while others not serving on the drafting committee had the opportunity to propose ideas for the committee's consideration. Consequently, the constitution contained many clauses on local autonomy and popular participation that were considered to promote the highest degree of democratization ever witnessed in Thai modern history.

The Parliament was obliged to legislate on the plan and procedure of decentralization within two years after the ratification of the 1997 Constitution. The Plan and Procedure of Decentralization to Local Administrative Organizations Act of 1999 mandated the formation of the Decentralization Commission chaired by the Prime Minister. The commissioners were divided into three groups: ministerial representatives from decentralization-related agencies, representatives from three types of local government, and academics (Table 1). The commission was responsible for drafting the National Decentralization Plan that was subject

to revision every five years. The plan specifies functions for each type of local government and identifies local revenue sources (Figure 1).

Table 1. Composition of the National Decentralization Commission according to the Plan and Procedure of Decentralization to Local Administrative Organizations Act of 1999

Type of Commissioners	Number
Chairperson	▪ ***Prime Minister of Thailand***
Representatives from central government ministries (11 members)	▪ ***Ministry of Interior***: Minister, secretary-general, directorate-general of the Department of Local Administration ▪ ***Ministry of Finance***: Minister and secretary-general ▪ ***Ministry of Education***: Secretary-general ▪ ***Ministry of Public Health***: Secretary-general ▪ ***Council of State***: Secretary-general ▪ ***Civil Service Commission***: Secretary-general ▪ ***National Economic and Social Development Board***: Secretary-general ▪ ***Budget Bureau***: Directorate-general
Representatives from local administrative organizations (12 members)	▪ ***Provincial Administrative Organizations***: 2 presidents ▪ ***Municipalities****: 3 mayors ▪ ***Tambon Administrative Organizations***: 5 mayors ▪ ***Special Local Government Units:*** Bangkok governor and Pattaya mayor
Academics (11 members)	▪ ***Public Administration***: 3 scholars ▪ ***Local Development***: 2 scholars ▪ ***Economics***: 2 scholars ▪ ***Local Administration***: 2 scholars ▪ ***Law***: 2 scholars

Source: The Plan and Procedure of Decentralization to Local Administrative Organizations Act of 1999.
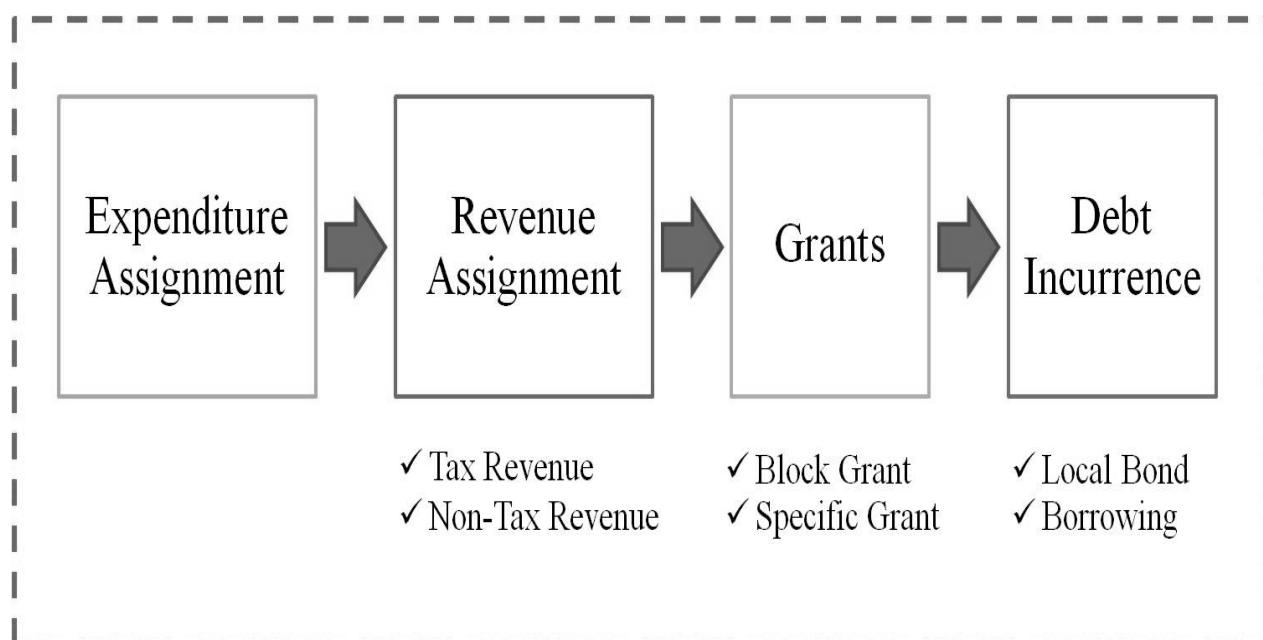
Figure 1. Decentralization Framework based on the Plan and Procedure of Decentralization to Local Administrative Organizations of 1999.

In the case of municipalities, the 1999 legislation spelled out 31 functions, a majority of which were basic public services, such as water treatment, garbage collection and disposal, cultural promotion, road maintenance, local economic development, social welfare services, slaughterhouse inspection, zoning, public park maintenance, and emergency management. Apart from the 1999 law, Thai municipalities were still regulated by the Municipality Act of 1933 that divided municipal governments into three categories based on population size (Table 2). The 1933 law further assigned a different set of service responsibilities to each type of municipality.

Table 2. Types of Thai Municipality with Population Size.

Type	Population Size
Thesaban Nakorn (Metropolitan Municipality)	> 50,000
Thesaban Muang (City Municipality)	10,000-50,000
Thesaban Tambon (Sub-district Municipality)	< 10,000

Source: The Municipality Act of 1933.

As shown in Table 3, municipal government's responsibilities were divided into *compulsory* responsibilities and *optional* responsibilities. For instance, in the case of *muang* municipalities, provision of sanitized water for daily use and consumption was a mandatory function. Therefore, the constitutional and legal frameworks in Thailand were clearly oriented towards promoting and fostering the roles of local government—particularly the municipal government—in producing and delivering essential public services to the local population. However, there was a disjuncture between the constitutional/legal principles and actual practices.

Table 3. Compulsory and Optional Responsibilities of Municipal Government

	Tessaban Nakorn (*Nakorn* municipality)	*Tessaban Muang* (*Muang* municipality)	*Tessaban Tambon* (Sub-district municipality)
Compulsory Functions	1. Maintenance of law and order 2. Provision and maintenance of roads/sidewalks, public space, and refuse and trash disposal 3. Prevention of infectious diseases 4. Fire protection 5. Education 6. Clean water 7. Slaughterhouse inspection 8. Community medical centers 9. Public restrooms 10. Street lights 11. Drainage 12. Other public health and social services	1. Maintenance of law and order 2. Provision and maintenance of roads/sidewalks, public space, and refuse and trash disposal 3. Prevention of infectious diseases 4. Fire protection 5. Education 6. Clean water 7. Slaughterhouse inspection 8. Community medical centers 9. Public restrooms 10. Street lights 11. Drainage	1. Maintenance of law and order 2. Provision and maintenance of roads/sidewalks, public space, and refuse and trash disposal 3. Prevention of infectious diseases 4. Fire protection 5. Education
Optional Functions	1. Provision of market, ferry, and harbor facilities 2. Maintenance of cemeteries and crematoria 3. Provision of employment benefits 4. Commercial development 5. Provision and maintenance of hospitals 6. Other necessary public utilities 7. Sport stadiums and wellness centers 8. Vocational schools 9. Public parks and zoos 10. Other public health services	1. Provision of market, ferry, and harbor facilities 2. Maintenance of cemeteries and crematoria 3. Provision of employment benefits 4. Commercial development 5. Provision and maintenance of hospitals 6. Other necessary public utilities 7. Sport stadiums and wellness centers 8. Vocational schools 9. Public parks and zoos 10. Other public health services	1. Provision of market, ferry, and harbor facilities 2. Maintenance of cemeteries and crematoria 3. Provision of employment benefits 4. Commercial development 5. Clean water 6. Slaughterhouse inspection 7. Community medical centers 8. Drainage 9. Public restrooms 10. Street lights

Source: The Municipality Act of 1933.

One of the major obstacles to the decentralization process in Thailand was the national government's half-hearted commitment. The transfer of public service functions from the ministries to local administrative organizations was not executed according to the National Decentralization Plan (Tae-Arak, 2010). Every ministry was reluctant to let go their current functions (and budget resources) that were supposed to be devolved to the local level. Thus, a large number of public service functions—even those specified in the Plan and Procedure of Decentralization Act—fell within the realm of national government responsibility, while the local administrative organizations' policy and program initiatives remained limited. For example, in the public health domain, only 10 out of 34 health promotion functions had been devolved to the local level (Tae-Arak, 2010).

Another impediment was the local governments' fiscal wherewithal to implement even a narrow range of functions. As with their limited scope of responsibility, municipalities in Thailand had a restricted range of income to finance their operations. Generally, there were four revenue sources for municipal governments: (1) locally collected revenues; (2) revenues that were centrally collected and returned to localities; (3) shared taxes; and (4) intergovernmental transfers. Typically, the first three types were rarely sufficient for municipal government operations. Thai municipalities succumbed to perennial revenue shortfalls and had to rely on two types of intergovernmental fiscal transfers. The Thai intergovernmental transfers were divided into *general grant* and *specific grant.* While general grants allowed local authorities to determine what and how to spend the allocated funds, specific grants were truly specific. The Ministry of Interior, not the local authorities, decided *what* and *how* to spend the specific intergovernmental transfers. Constrained by the interior ministry's stringent spending rubrics, the Thai local governments were reduced to mere implementers of centralized policy decisions. This would not have sabotaged the decentralization reform, had specific grants not constituted the large part of local government budgets around Thailand. In reality, specific grants were the fiscal arteries of Thai local government (Patamasiriwat, 2012). For a large number of local communities, more than half of their annual revenues came from specific grants alone. In this context, whereas the local autonomy was constitutionally enshrined, the Ministry of Interior's specific grant system curtailed much of the local government's fiscal and decision-making autonomy.

Not only did the specific grant system undermine local self-determination, its inconsistent grant allocation criteria had instigated the clientelistic relationships between the national politicians, national bureaucrats, and local government officials (Mutebi, 2005). Since the decentralization reform unfolded, it had become widely known among the Thai local officials that the amount of specific grants for each locality depended much more on personal political connections than pure economic and technical reasons. In most cases, lobbying for specific transfers required the mastery of reaching kickback agreements with the national politicians and bureaucrats. However, not all local governments in Thailand possessed such political prowess and hence were left with one last option to finance their public services: borrowing from commercial banks or from the Municipality Promotion Fund (MPF).

It was against this backdrop of the decentralization of functions and resources to local administrative organizations –but with unfunded mandates and politicized grant allocation criteria—with which the municipal authorities, such as *Tambon Ban Khor* municipality, had to contend as they struggled to secure the general welfare of local constituents and execute the constitutionally and legally mandated functions. With the continuing reality of the imbalance of authority and power between national and sub-national governments, as well as revenue constraints, Thai municipalities continued to witness a complex working environment. Exactly *how* complex would it be for the *Tambon Ban Khor* municipality to fulfill its public service responsibility? Mayor *Lek*'s realization of his campaign promise would certainly necessitate some careful treading along the central-local authority axis, together with considerable courage, ingenuity, and creativity.

BAN KHOR MUNICIPALITY AND RUNNING-WATER DILEMMA

Ban Khor Municipality: The Place

Located in Khon Kaen Province, 437 kilometers northeast of Bangkok, *Ban Khor* sub-district was comprised of 3,426 households or 15,494 people (as of the 2011 Government Census). The *Tambon Ban Khor* municipality was chartered first as the *Ban Khor* sanitary district in 1972 by the interior minister's ministerial order and became *Tambon Ban Khor* municipality in 1999 after the Plan and Procedure of Decentralization to Local Administrative Organizations went into effect. Since *Ban Khor* was situated near Khon Kaen Province's capital city and Khon Kaen University—one of the largest public universities in Thailand (See Figure 2), the 1999 population size reached the 10,000-population threshold as set by the Municipality Act of 1933 for a *Muang* municipality. However, *Ban Khor* was not elevated to the *Muang* municipality status because the mayor before *Lek* did not initiate the status change. The previous mayor's decision was politically driven; he did not want to be legally accountable for *Ban Khor*'s lack of running water, as provision of sanitized running water was one of the *Muang* municipality's compulsory functions. Even though a *Muang* municipality's mayor received more salary than his *Tambon* counterpart, *Lek*'s predecessor's political calculation revealed to him that more personal income from the *Muang* mayoral position might not be worth the risk of failure to meet the legal requirement to provide running water to his constituents.
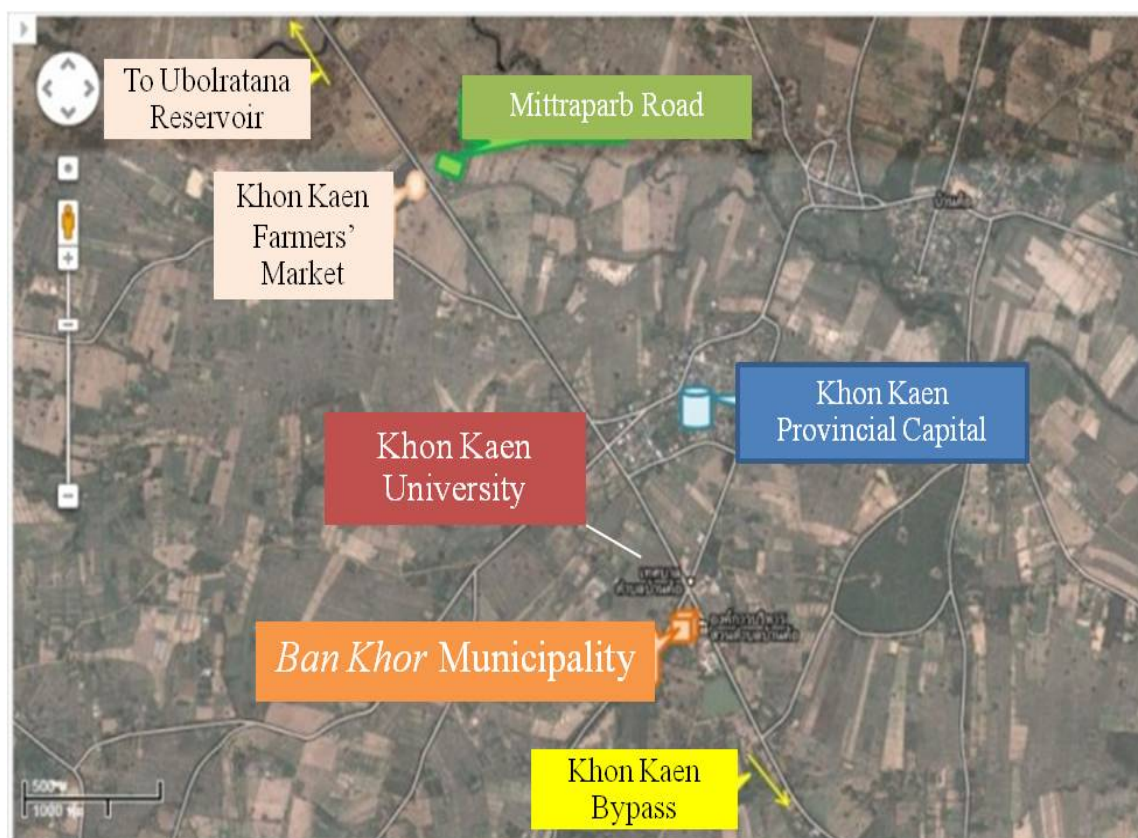
Figure 2. Tambon Ban Khor Municipality Map.

The *Tambon Ban Khor* municipal administration consisted of two essential parts: the legislative and executive branches. The legislative branch consisted of 12 municipal councilors who were elected by district and served for 4 years. The executive branch led by an elected-at-large mayor oversaw the permanent municipal government officials, consisting of the municipal administrator, department heads, and municipal government employees. The permanent municipal administration was divided into five departments:

1. Office of the municipal administrator,
2. Public works department,
3. Education department,
4. Public health and environmental protection department, and
5. Finance department.

Due to the Khon Kaen provincial capital's economic dynamism, the resulting urban growth caused the capital's periphery to extend in all directions in the 1990s. The urban sprawl however did not reach *Ban Khor*. Even though the municipality's population size expanded, the rate of population expansion was not as rapid as in adjacent local authorities. Further, the majority of *Ban Khor* residents remained subsistent farmers until today, with sugarcane cultivation and dairy farming as the two main agricultural activities. The agriculture-based economy left the *Tambon Ban Khor* municipality with a narrow tax base.

Ban Khor Municipality: The Flood and Drought Problems

Ban Khor municipality was a large farm community, covering almost 130 square kilometers. The majority of residents were sugarcane farmers. The nearest freshwater body was the *Nam Phong* river whose shorelines were about 10 kilometers north of the agrarian community. In every monsoon season, half of the municipality was inundated by storm water run-off. As there were no irrigation canals to help prevent the community from getting affected by the perennial flood, the majority of *Ban Khor* residents had to bear with crop damage and, in some years, encountered total crop losses.

Life got even harsher for the Ban Khor residents in the dry season. The Tambon Ban Khor municipality owned one community water tower that could not provide an adequate supply of water for the community members (Figure 3). The water facilities, including the water tower and water pasteurization facility, were built by the Royal Irrigation Department several decades ago and were transferred to the *Tambon Ban Khor* municipality shortly after the Parliament enacted the Plan and Procedure of Decentralization Act in 1999. The municipality continued to receive the *specific* intergovernmental grant from the National Health Security Office (NHSO), specifically earmarked for the maintenance of the water pasteurization facility. The *Ban Khor* municipality received the NHSO's Annual Drinking Water Safety Awards uninterruptedly between 2000 and 2011.

Figure 3. Community Water Facilities in *Tambon Ban Khor* Municipality.

Yet, despite all the honors and awards, water from the municipality's water facility was inadequate for daily use and consumption by the *Ban Khor* residents. Interestingly, even though *Tambon Ban Khor* was endowed with the state-of-the-art water facilities, it lacked a wide-ranging water piping system capable of serving the entire 120-square-kilometer land mass. As one of the Ban Khor residents opined:

> …..Surely, *the water from the tower is safe to drink. But, it could be even better for us if we got to use it at all. My neighborhood is not covered by the municipal water service piping system, even though we live only a couple of kilometers away from the municipal government building…..*

In *Ban Khor,* there were twenty such neighborhoods that were located beyond the radius of the municipality's water piping system. Certainly, residents in these unfortunate neighborhoods were never given an opportunity to savor the award-winning pasteurized water. Then, exactly how did they get water for their daily use? The answer from one of the deprived *Ban Khor* residents would certainly startle even those living in a nearby Khon Kaen's Nakorn municipality:

> …..Well, *it's a sad, but true, life story of people around here. We have to go to a nearby municipality to buy water for showering, cleaning clothes, and washing dishes. For drinking water, we go to Tesco Lotus, Big C, or other supermarkets in town to stock up on bottled water. This is our ordinary routine. Only God knows when it will end…..*

The municipal authority was well aware of the running water shortage, but was also deprived of financial resources to alleviate the residents' inconvenience. Even the locally collected revenues were barely sufficient for the municipal government personnel's salaries, benefits, and utility bills. On the other hand, the amounts of shared taxes and centrally collected taxes were difficult to forecast and, indeed, were always over-forecasted by the Municipal Finance Department. The only option left was to seek either the intergovernmental *block grant* and/or *specific transfers* to finance the construction of the municipality's water piping system.

THE *TAMBON BAN KHOR* MUNICIPALITY'S SEARCH OF MONEY

Learning the Ropes of Intergovernmental Politics

Back in the *Tambon Ban Khor* municipality's conference room, the atmosphere was gloomy, as the newly sworn-in mayor was informed by his subordinates that his election campaign was but an implausible daydream. Mayor *Lek*'s first plan to file a petition to the central government for a grant was shredded into pieces by his municipal administrator who recounted the previous mayor's unsuccessful quest for such a grant:

> *[The] intergovernmental fiscal transfers are a complete joke. The allocation criteria and procedure are not transparent at all. Without the help of a national politician, the Ministry of Interior would be laughing at your grant proposal and give you nothing. With all due respect, I understand you are an excellent writer, but literary skills do not mean anything for the Lions.*[2]

Lek however argued that he was aware of two clauses in the 2007 Constitution[3] that prohibited national politicians from interfering with the central bureaucratic operations and decision making. *Lek* was convinced that his municipal administrator was overly pessimistic about the interior ministry's grant allocation process: "*Tan Palad* (Mr. Municipal Administrator), I think you are too negative towards the central government officials." The director of the Finance Department concurred with the municipal administrator and offered *Lek* with more detail of his predecessor's struggle:

> *…...What Tan Palad said was not a joke at all. The previous mayor had to ask a Khon Kaen MP to help us out. In all these years, we were well aware of the running water problem and submitted multiple grant proposals to Bangkok, but received absolutely nothing. When your predecessor went to see that MP was in 2009 when his party was in a coalition government. He promised to bring our case before the minister of interior, but never kept the promise. We waited for almost one budget cycle until the 2011 General Election where the MP's party suffered from considerable losses…..*

As previously noted, the Thai intergovernmental fiscal transfer system was notorious for its opaque allocation criteria. In the public financial theory, intergovernmental fiscal transfers were intended to be a remedy for the horizontal fiscal inequity among local administrative organizations. In other words, the financially worse-off communities ought to receive more intergovernmental transfers than the better-off communities. However, when carefully considering the amount of transfers allocated for each municipality in the Khon Kaen Province, one would see the irregularity and injustice of the Ministry of Interior's decision-making process. As demonstrated in Figure 4, from 2552-2554 (2003-2011), Municipality X from the same Khon Kaen province registered a higher amount of municipal government income for every revenue source than the *Ban Khor* municipality. The disparity between the two municipalities was clear in the intergovernmental grant category.

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[2] Lions denote the interior ministry's officials because a Thai mythological lion is the ministerial emblem.
[3] The 2007 Constitution was promulgated after the 2006 military-led coup d'état that toppled a democratically elected government. While most elements of the 1997 People's Constitution were maintained, the 2007 Constitution was drafted by a group of former military officials, bureaucrats, and academics who despised politicians.
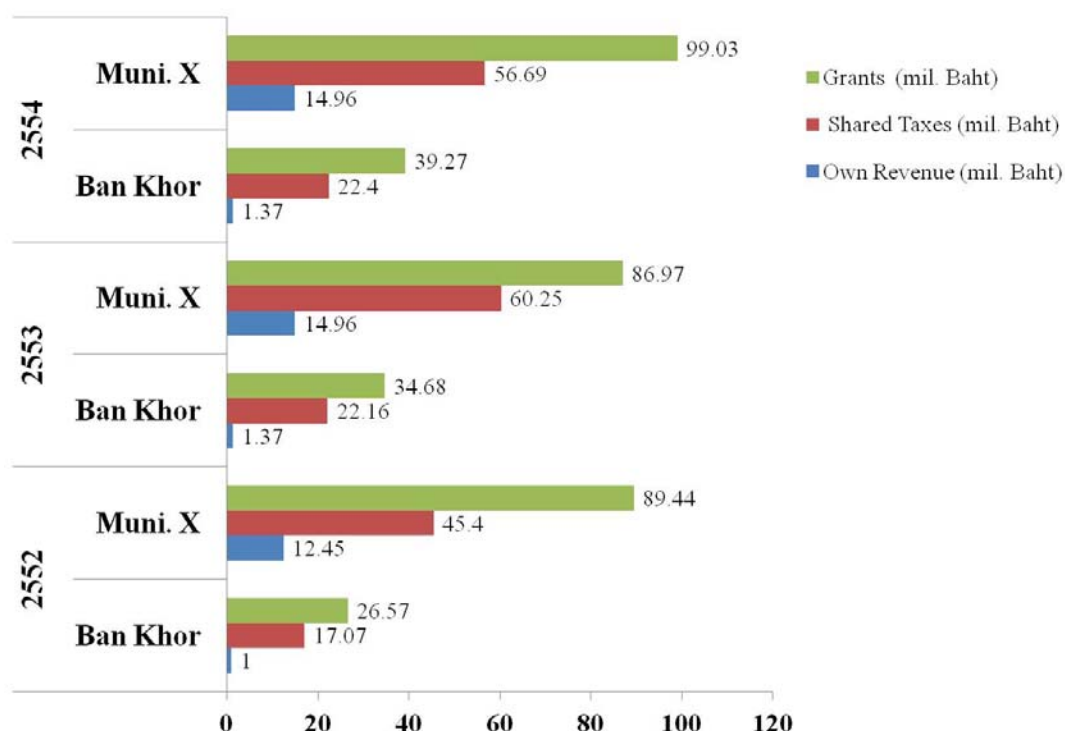
Figure 4. Revenue Comparison between *Tambon Ban Khor* Municipality and Municipality X

The differences between *Tambon Ban Khor* municipality and Municipality X would not have been a problem at all, had Municipality X not had a smaller population size and a much smaller land area to be responsible for. As show in Table 4, Municipality X obviously carried lighter workload than *Tambon Ban Khor* municipality, in terms of population served. In terms of land area, Municipality X only had three square kilometers to serve, while *Tambon Ban Khor* was almost 130 square kilometers in land area.

Table 4. Population and Land Area of *Tambon Ban Khor* municipality and Municipality X.

Year	Municipality	Population
2552	Ban Khor	5,310
	Muni. X	12,660
2553	Ban Khor	15,400
	Muni. X	12,510
2554	Ban Khor	15,494
	Muni. X	12,379

After the Finance Director finished her explanation and presentation, everyone in the room kept silent. Mayor *Lek* was the first person to react to these statistics. "This is unfair and absolutely absurd," exclaimed *Lek.*

> *......How could our municipality, larger in population size and land mass, have received a smaller amount of intergovernmental transfers than that municipality? Has the world gone mad? What kind of intergovernmental grant system is this?.....*

"The Thailand kind," the municipal administrator promptly replied. The amount of intergovernmental fiscal transfers that a municipality receives in each fiscal year depends more on the quality of political connections with national politicians and central government bureaucrats than on a municipal community's actual needs. The intergovernmental transfers were funneled through the Department of Local Administration (DOLA)—a department-level agency in the Ministry of Interior that was established in 2003 to supervise local government operations, local government budgets, and intergovernmental fiscal transfers. Whereas the Provincial Administration Department (DOPA) was the citadel of central government control over local communities in the 20th century, it was replaced by DOLA in the 21st century. Prior to decentralization, the interior ministry's senior bureaucrats competed among one another to secure the DOPA directorate-general position at all costs. After decentralization, the competition remained as dynamic, but attention has turned towards DOLA.

"If you [the mayor] really wanted to pursue the *specific* grant for the construction of a wide-ranging piping system," the municipal administrator continued, "you would have to get in contact with the current MP of our district." There was no guarantee, however, that DOLA would approve Mayor *Lek*'s project proposal within a few days or months since the mayors of other local administrative organizations also submitted their development project proposals and had stronger political connections with the party in government. In addition, the municipal administrator warned *Lek*:

> *.....If you strike the right connection, it's easy money. But even with the easy money, you will have to set aside at least 30 percent of the grant as kick-backs for the interior minister, the MP, the DOLA directorate-general, and probably all their secretaries. In the end, if our municipality ends up with some money left over for the piping system, it will be your enormous legacy. But, from what I have heard, life is tough....*

Mayor *Lek* was not prepared for this at all. In all these years, he figured that his *Tambon* municipality was so small and unimportant and that with the heavily publicized decentralization reform, the *Ban Khor* residents would be allowed to craft their own development path and strategies, unfettered by the central government intervention. Particularly for a commodity as basic and necessary as the running water system, his community's plight should have been addressed locally and easily. After all that were imparted to him today by the municipal officials, local autonomy enshrined in the constitutions was still far from reality.

Exploring Other Options

The meeting went silent for a few minutes until the mayor broke the silence by asking his subordinates for the alternative ways to get running water to his constituents:

> *The Ban Khor voters want running water and don't want to hear any excuses from me because running water for all was my main election campaign policy. My question for you folks is what then did you do prior to my mayorship to help out the Ban Khor residents? How could the previous mayor get away with doing absolutely nothing?*

The Public Works Director quickly commented that in the beginning of his term, *Lek*'s predecessor also strove to secure the fund, but stumbled upon too many bureaucratic hurdles that eventually discouraged him from moving forward with the development project. In fact, *Ban Khor*'s former mayor consulted the director of Khon Kaen's Provincial Waterworks Authority (PWA) about the possibility of a joint venture between the *Tambon Ban Khor* municipality and the PWA. Unfortunately, the PWA director could not assure the former mayor of his organization's ability to make the collaborative scheme a reality because the PWA decision-making authority rested with their Board of Trustees in Bangkok and a collaborative venture had to be approved by the board. At that moment, the only thing that the Khon Kaen PWA office could do was to expand its water service piping system from the *Nam Phong* river to *Tambon Ban Khor* municipality. The municipal government however had to be responsible for the expansion cost.

The PWA story was another major disappointment for Mayor *Lek* whose Plan B was to turn to the PWA for assistance. However, a real Pandora's Box for *Tambon Ban Khor*'s new mayor had yet to unfold. As *Lek* glanced over his municipality's budget summary for the current fiscal year, he saw for the first time that this farming community was 23 million baht in debt. The Finance Director rushed to explain that the debt:

> *……was the former mayor's move to obtain money to be used by the PWA to expand the piping system from the Nam Phong river to Ban Khor. However, the amount of money was enough only for constructing the water main pipes along the municipality's main road....*

Lek now came to realization why only people whose houses were situated along the community's main road did not complain about their commute to the city or the nearby municipality for potable water. They did not have to commute at all. Worse, they made a living out of this main water piping system by selling potable water to their fellow *Ban Khor* residents. However, *Lek* was curious where the municipality got the 23-million-baht loan from. The municipal administrator supplied *Lek* an elaborate answer:

……a municipality can borrow from three sources: (1) the Local Government Pawnshop Fund, (2) private banking institutions, and (3) the City Development Fund. The former mayor got the 23-million-baht loan from the Krung Thai Bank (KTB)—one of the Thai government banking institutions. The debt maturity is 10 years.…

Mayor *Lek* was relieved that he finally found a financing tool to help deliver his election campaign promise. He was not reluctant to instruct the Finance Director to prepare all the paperwork for loan application. Everything seemed promising until the Finance Director informed *Lek* that:

……DOLA and the Auditor-General have recently changed the regulations regarding local government borrowing and guarantees. With the new regulations, our municipality can no longer borrow from the private banks because the local government debt ceiling set by the interior ministry is now 20 million baht. And our municipal government already exceeded it.….

Even if the *Tambon Ban Khor* municipality decided to apply for a private loan, the municipal government had to undergo a rigorous process and meet the criteria that had been revised by the Ministry of Interior. The process started with the preparation of a report on the municipality's five-year financial data, as well as a cost-benefit analysis report of a development project that would use the loan proceeds. The two reports had to be reviewed by a committee consisting of the provincial governor, DOLA's provincial representative, and other ministries' provincial agents. The municipality had to obtain an approval from this committee before it could submit its loan application to a private banking institution. To worsen the matter for Mayor *Lek,* the City Development Fund (CDF) had the same rigorous requirements.

LITMUS TEST FOR LEADERSHIP, INGENUITY, AND CREATIVITY

The municipal administrator's farewell statement dealt a serious blow to Mayor *Lek*'s spirit. *Boon Chuay* had served as *Ban Khor* municipality's administrator for decades and possessed a depth of knowledge of the laws and regulations pertinent to local government operations. After the meeting ended, *Lek* retired to his office and consulted his closest friends over the telephone, none of whom could offer him any meaningful advice. Everybody was perplexed by the situation, particularly by all the bureaucratic regulations dictating local government borrowing. The newly sworn-in mayor felt lethargic and was in dire need for a strategic plan to implement his running-water-for-all campaign policy.

REFERENCES

Langford, J., & Brownsey, K. L. (1988). *The Change Shape of Government in the Asia-Pacific Region.* Quebec, Canada: The Institute for Research on Public Policy.

Phongpaichit, P., & Baker, C. (2005). *A History of Thailand.* Boston: Cambridge University Press.

Raksasat, A. (1995). Kankrajai amnat ti pidplad lae samsak kong mahadthai lae nakkanmuang. *Warasarn Sukhothai thammathirat , 8* (2), 18-21.

Tae-Arak, P. (2010). *Synthesis of Health Service Decentralization Approaches.* Nonthaburi, Thailand: Health System Research Institute.

Unger, D. (2003). Principles of the Thai State. In B. Heredia, & B. Schneider, *Reinventing Leviathan.* Miami, Florida: North-South Center Press, University of Miami.

Synthesis Problems and Obstacles of "Public Forums Nationwide for National Reconciliation", in Case Study of 6 provinces in Northeastern Region, Thailand

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🟦	Kalasin
🟩	Khon Kaen
🟧	Nakornratchasima
🟪	Mahasarakham
🟨	Roi Et
🟦	Chaiyaphum
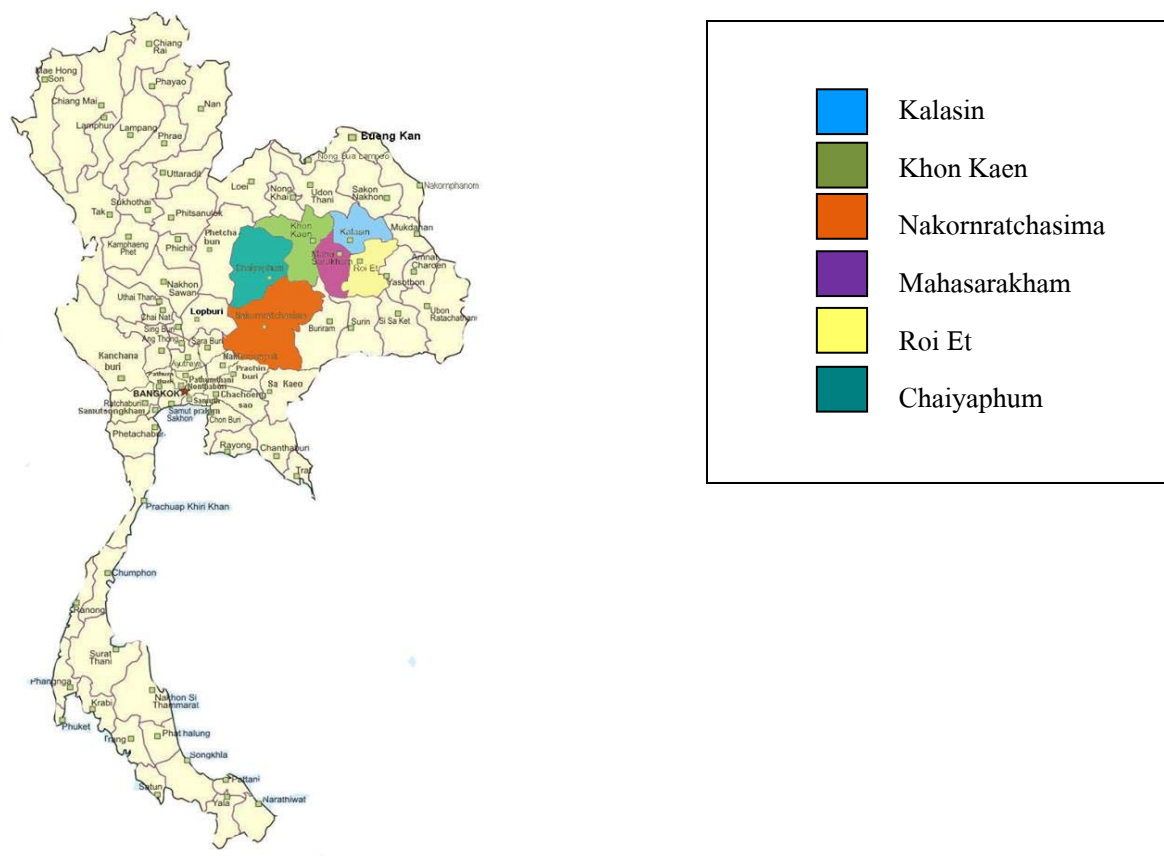
Abstract:

After Yingluck Shinawatra became Thailand's Prime Minister, Her government declared the urgent policies to be implemented in the first year, especially, "fostering reconciliation and harmony among people in the nation and restore democracy". In 2012, The reconciliation bill sponsored by General Sonthi Boonyaratklin (Matubhumi Party) was collapsed by chaos in parliament and People's *Alliance* for Democracy movement. However, there are now more 6 reconciliation bills and amnesty bills to be pending in parliament.

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Although, The government could not pass those bills. The government tried to commit the proposals recommended by Thailand's Truth for Reconciliation Commission (TRC) and King Prajadhipok's Institute. Those were "dialogues for national reconciliation". The government assigned PM's Office Permanent Secretary Thongthong Chandrangsu as chairman of the TRC subcommittee, Community Development Department ; Ministry of Interior and Suan Dusit Rajabhat University to be host of these dialogues called "Public Forums Nationwide for National Reconciliation" by spending 168 million baht, consisted of 420 moderators trained and 80,000 people in 77 provinces, held in June and July, 2013. This project is to seek solutions for Thailand and bring about national reconciliation.

This research article, The author participates in 6 provinces in the Northeastern Region; Khon Kaen, Nakhon Ratchasima , Kalasin ,Chaiyaphum,Roi Et and Mahasarakham in June and July, 2013. The author observes ,participates in Public Forums and interviews with many the stakeholders, for example, state agents ,moderators and ordinary people.

The authors argues and synthesizes that "Public Forums Nationwide for National Reconciliation" have many problems and obstacles ;for instance, too hasty and short-term project arrangement, less public relation , moderators neutral, monologue moderators, excessive people in each Public Forums (800-1,000 people- that is not suit for dialogues), irrational and illogical people qualification process both occupation type and political necessity and meaningless of ordinary people motivation to participate the forum (many people participate because of money about 400-600 baht for a person/day) etc.

Consequence, The authors proposes that "Public Forums Nationwide for National Reconciliation" are not good methods to reconciliation seeking and these forums are nothing more than government and parliament legitimacy making to consider reconciliation bills and amnesty bills in this August,2013. However, The author, has written a book and articles for recent years about reconciliation concept and foreign countries models, will suggest some good and rational models for Public Forums arrangement and suggest main ideas for reconciliation at the end of the article.

1. Introduction

After Ms.Yingluck Shinawatra became Thailand's Prime Minister in 2011, her government declared urgent policies to be implemented in the first year, especially, "fostering reconciliation and harmony among people in the nation and restore democracy". In 2012, The reconciliation bill sponsored by General Sonthi Boonyaratklin of Matubhumi Party (Motherland Party- He was the coup leader in 2006) was collapsed by chaos in parliament and the resistance movement of People's Alliance for Democracy (The yellow shirts). However, there are now a further 6 reconciliation bills and amnesty bills to be pending in parliament.

Although the government could not pass these bills, the government tried to commit the proposals recommended by the Thailand's Truth for Reconciliation Commission (TRC) and the King Prajadhipok's Institute (Institute for Democracy studies). These proposals were "dialogues for national reconciliation". The government called these dialogues "Public Forums Nationwide for National Reconciliation" (PFNNR), by spending 168 million baht (about 5.5 million U.S. dollar), consisted of 420 well-trained moderators and 75,700 people were expected to participate in 77 provinces nationwide, held in June and July,2013. Hopefully, this project will seek solutions for Thailand and bring about national reconciliation.

2. Thai Society and Location of Dialogues for National Reconciliation

In April and May 2010 under Mr.Abhisit Vejjajiva government, Thailand suffered the severest outbreak of political violence, leading to the deaths of 101 people. Nearly all of the victims were unarmed, innocent civilians exercising their right to protest (The red shirts). This event represents the greatest number of deaths in Thai modern political history[2] (Matichon,17 May 2013: 2) and created the wound that has been so hard to be heal in Thai society. Not long after that event, the Abhisit Vejjajiva government set up the Thailand's Truth for Reconciliation Commission (TRC), with Former Attorney General Mr.Kanit Na Nakorn as the chair, to probe the clashes between state authorities and protesters of the anti-government United Front of Democracy Against Dictatorship (the red shirts) and to find a way to decrease mass group conflict. The government, however, announced the dissolution of parliament after the TRC had worked only a year. Latterly, The Pheu Thai party (For Thai Party), under mainly the support of the red shirts, won the general election of 3 July 2011. The party led by Ms.Yingluck Shinawatra (being the younger sister of former primeminister Mr.Thaksin Shinawatra) became Thailand's Prime Minister.

The new government declared urgent policies to be implemented in the first year, especially, "fostering reconciliation and harmony among people in the nation and restoring democracy". The government also gave importance to restoring all victims of the coup d'état, 2006 and authorized the Truth and Reconciliation Committee (TRC) to continue working as well as assigned TRC -Subcommittee to assist and facilitate TRC. Besides, The Pheu Thai party ,a large majority of the parliament, assigned both the House Committee on National Reconciliation, General Sonthi Boonyaratkalin (leader of the former coup) as the chair and The King Prajadhipok's Institute (Institute for Democracy studies) to do academic research for national reconciliation.

Conflicts in Thai Society happened again when the members of The Pheu Thai party chose content from those researches to discuss in parliament. The purpose of the research was to enact an amnesty bill (to become known as the 'Reconciliation Bill') to all political groups and all wrongdoing. The beneficiaries of that bill were former PM Abhisit Vejjajiva and his colleagues, the soldiers who used tanks and weapons of war against the red shirt protestors, many head leaders of both the red shirts (anti- Abhisit Vejjajiva government movement in 2009-2011) and the yellow shirts (anti- former PM Thaksin Shinawatra, former PM

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[2] The number of deaths of the student uprising in 1973 was estimated at 77 people, in the student massacres 3 years later was 46 people and in Bloody May 1992 at least 45 died, 293 disappeared.

Mr.Samak Suntornvej and former PM Mr.Somchai Wongsawat movement and seized Bangkok's international airport in 2008) and all ordinary protestors except the political prisoners of Lese Majeste Law. The amnesty bill also proposed to withdraw legal results from Assets Examination Committee (AEC) ,a junta-appointed to investigate corruption allegations in Thaksin Shinawatra's administration (40,000 million baht confiscated (about 1,300 million US dollars)) , to judge again under a normal and democratic judiciary.

Consequently, The democrat party (The opposite party-The leader is former PM Abhisit Vejjajiva) and the anti-Mr.Thaksin and anti-the red shirts movements mutually condemned the Pheu Thai party ,called those researches as "illicit research" because they wished only to help Mr.Thaksin and the red shirts (those have been labeled "Puak Pao Ban Pao Mueang" (Red Shirts burn Thailand) and terrorists by the democrat party and the yellow shirts.)

Finally, Official statements of The King Prajadhipok's Institute were if the Parliament approved his research by majority voices, The institute needed to recall the research for preventing "Reconciliation War" ,that was from "Victors Justice", caused continuous violence in Thai Society.(Bangkokbiznews,4 April 2012:13) The institute also requested the government to public reconciliation dialogues for 3 years constantly, then The government could bring the amnesty bill to the Parliament as well as Mr.Kanit Na Nakorn ,the chair of the TRC, mentioned that reconciliation process had to take time, tolerance and people participation.(Nation Weekly,16 April 2012:22)

The author should affirm that official statements of The King Prajadhipok's Institute raised concepts and issues "reconciliation dialogues" to Thai Society for the first time by using interchangeably "appreciative dialogue" and "constructive dialogue".(Matichon,3 April 2012:2) Those were the same as some contents from its research ,for example, The Institute proposed to the government that "should arrange reconciliation public forums to mutual understanding, avoid a confrontation, search for common interest and finding a way out respectively both in truly ordinary people (not the political or group head) and the heads by having someone to be neutral to listen…these process will create atmosphere of public dialogue forum well and will be forums of seeing the future commonly"(The King Prajadhipok's Institute,2012:121)

Likewise, The TRC report conclusion later proposed that "Listening to public opinion , supporting to public forums , dialogues and public deliberation for the different opinion people can express ideas and listen to the others, these would be the channel to decrease the mutual distrust ,create mutual compromise and leading to mutual understanding for living in society among differences peacefully "(TRC,2012:241)

In June 2012, the parliament brought 4 amnesty/reconciliation bills, 1.The bill of General Sonthi Boonyaratkalin backed by 35 fellow MPs 2.The bill of Mr. Samart Keawmeechai, Pheu Thai Party MP from Chiang Rai province, backed by 50 fellow MPs 3.The bill of Mr.Niyom Worapanya ,Pheu Thai Party list MP, backed by 22 fellow MPs and 4.The bill of Mr.Nattawut Saikua, Pheu Thai Party list MP and The Red Shirt leader, backed by 74 fellow MPs, to consider. The contents of the 1-3 were alike that to amnesty all groups

and to withdraw legal results from Assets Examination Committee (AEC),while The contents of the 4 were to withdraw legal results from AEC but not amnesty people who charged with terrorists and murder or attempted murder charges in connection with deaths and injuries. Whereas The parliament were discussing the first bill of General Sonthi Boonyaratkalin, The Democrat MPs went upward to pulled forcibly the Parliament President, Mr.Somsak Kiatsuranont, and remove his chair for stopping the consideration of the reconciliation bill and The Pheu Thai Party MPs hurried up to protect the President that led to be in disorder and chaos in the Parliament. Finally, The president canceled the discussion however The Democrat MPs still hurled many objects and paper bills as well as shouted harshly at the President. At the same time, Many anti-groups movements were outside the parliament about 10,000 people e.g. The yellow shirts, The multi-colored shirts and The Siam Samakkee (Thai Harmony for protect the King) to resist this bill because they were worried about attempt to whitewash Mr.Thaksin and judiciary removal that equaled to destroy the justice system under His Majesty King.

Consequently, there had not discussed reconciliation bills in the Parliament for a year. Recently, The Pheu Thai Party agreed on the amnesty bill of Mr. Worachai Hema (Pheu Thai MP for Samut Prakan Province and The Red Shirt leader, backed by 42 fellow MPs) to be the top debated by the House in August 2013.The contents are to amnesty broadly for political offenders, but excludes all groups protest leaders and authorities . At the same time, Mr. Chalerm Ubumrung, Deputy Prime Ministers, proposed the amnesty bill (backed by 163 fellow MPs) to amnesty all groups and withdraw legal results from AEC. Therefore there are now 6 reconciliation bills and amnesty bills to be pending in parliament.

During waiting for the House in August 2013, The Government has been spending 168 million baht (about 5.5 million U.S. dollar) to arrange nationwide Public Forums of Reconciliation in June and July,2013 and iterated that committing by The King Prajadhipok's Institute and TRC proposals. The government hopes that Thai society can still glance at the light if there are reconciliation dialogues with ordinary people widely and constantly. It might be hopeful to all groups reconciliation in the near future. However, It should be considered the preceding meanings and perceptions of reconciliation public forums in Thai Society contexts.

3. The Meanings and Perceptions of reconciliation public forums in contexts of Thai Society

The complete report of TRC gave the 3 relatively conceptual meanings as following 1) Public Forum is conference that people participate in large numbers and open chances to the participants to exchange data and to share opinion. This conference concentrates on listening proposal from the participates. The public forum organizer has been obligated to answer the questions and applied useful data. 2) Deliberative dialogue is many groups discussion. There are not specific for any sector representatives and groups in conflict. The participates will exchange opinions and experiences as well as perceive and reflect different sides for holistic understanding and important base on decision and suit conduct later. Importantly, Deliberative dialogue is needless to conclude in conflict issues. 3) Public Deliberation is not a discussion for support mutual understandings like deliberative dialogue.

Public Deliberation is mainly process of shared public decision and search for shared consensus to problems solving by absolutely not win-lose orientation. (TRC,2012:241)

There are still the further supports that whatever such the reconciliation public forums need to be done "because Thai people will more clearly understand the meaning of reconciliation is being carried forward that what the fundamental conflict problems in Thai society have been"(Bu-Ngah Tonyong,2012:8). This reconciliation public forums are the good route because "it is not involved in the politicians and the hidden agendas that can find the past Truth and can be the way out for Thai society reconciliation". (Kowit Puang-ngam,2012:43) Moreover, The dialogue methods have been hopeful that the participates will use those heart and elegance in communication comprised of "to listen, to talk, to read and to write" that were called "appreciative dialogue". (Yeaw Talalom (a) ,2012:11). Besides, there is argument that the social therapy to reconciliation need to listen all voices ,then collaborate to search the way out resulted in shared wills and reflections. (Yeaw Talalom (b),2012:11)

An academician suggested the term of "appreciative dialogue" had been closely related to traditionally preliminary thoughts of Thai society as "holistic and Buddhist" because these thoughts had not been mechanical and divided into the colors like the present. He also clarified that "appreciative dialogue" is not interest negotiation or convincing people to accept our own proposals. This dialogue is still not hidden agenda dialogue and mudslinging. More importantly, the participates must bracket own prejudice and believes for spirit to prepare for deep listening. (Seri Pongpit,2012:6) While an intellectual gave examples of experiences from conference of many organizations ,for example everyone can talk and propose own mind but cannot reprimand others thinking in every conference in Khonkaen Municipality and all conferences in The King Prajadhipok's Institute that all decisions have not been used voting. Both examples made the involved "impressive, want to return conference joyfully and enjoy to see the others pleasingly" (Narit Sektheera,2012:13). An intellectual gave more example of Banmor, Subdistrict Administrative Organization (SAO.) in Phetchaburi Province that has had the projected called "one evening, one alley". The project has been to dialogue with the people every evening and has been not set dialogue agenda. This SAO therefore has known many people demands and people harmony and reconciliation are by-products. People in some alleys previously were hostile when this project happened; people could listen to the others problems and adjusted more understanding. Chief Executive of the SAO concluded that "If people do not talk together, they will not know anything. But if they talk, Conflicts can be transformed into reconciliation. All worldly societies are the same"(Thairath,2012:5)

Given these meanings have been crucially based on reconciliation dialogue because if people talk and listen to each other, then recognition and understanding the others in term of "appreciative dialogue". Hopefully, It might lead to successful reconciliation.

While Perceptions of reconciliation public forums in contexts of Thai Society could been divided into the following 3 groups: 1. Perceptions of The King Prajadhipok's Institute 2. Perceptions of the opposition party and some social groups 3.Perceptions of the government.

Firstly, The King Prajadhipok's Institute proposed that if the government already approved institute s' research. Next the government should arrange "dialogues for national reconciliation"(Ban Muang:2012:6) for preventing "reconciliation war" that had been of "Victor 's Justice". The dialogue should focus on nationwide people. Importantly, the dialogue should arrange before reconciliation bill, amnesty bill, even constitutional amendment. The necessity to dialogue because the reconciliation atmosphere has not happened. The dialogue should take time at least 3 years.

Secondly, The Democrat party or the opposition party proposed that carrying reconciliation bill or amnesty bill to the House was too hasty and brief process. The government should follow The King Prajadhipok's Institute proposals to "appreciative dialogue" for mutual finding the way out of country problems.(Thairath,2012:3) The Democrat repeated importance of national reconciliation dialogue many times. A top member of the democrat iterated that "If the government would see real and true reconciliation, It should start from dialogue more than going cold turkey anything and only aim at amnesty bill"[3](Daily News,2013:10) The other member said dialogue was process to harmonize people more than imposing the bills to the House.(khaosod,2012:10)In the same way as The Relative Committee of bloody May 1992 Heroes said that listening to the voices of many people and real people participation were very important.(The Manager Daily:2012:8)

Although The Democrat party agreed to dialogue at least 3 years (Matichon, 2012:16), They have been worried about the government dialogue would be only "ritual" because The government might conclude everything "resulted in Mr.Thaksin demands absolutely"(The Manager Weekly:2012:14). If the government have done like that, It deceived Thai people because the real government intention has been to whitewash Mr.Thaksin and The red shirts. Furthermore, national reconciliation dialogue, arranged by state agents (Community Development Department; Ministry of Interior), has been possible that "The government wants to dialogue with own groups, especially the red shirts, because of following Mr.Thaksin 's order"(Matichon.2012:11)

Thirdly, The government previously was uncertain between national reconciliation dialogue arrangement proposed by The King Prajadhipok's Institute ,If the government arranged ,It would collaborate with state agent networks and assigned many universities to choose the moderators in dialogue process (Thairath.2012:16), and disarrangement because of time-wasting and all PMs are from people so that they are already representatives. Besides, In the House Committee on National Reconciliation comprised of many sector opinions such as The chairman of Federation of Thai Industries, The chairman of Thai Chamber of Commerce etc. Mr. Yongyuth Wichaidit[4] therefore concluded that " 4-5 past years, In Thai society, we have listened and listened many people and we have known what/where the problems were"(Khaosod,2012:11).He also proposed that "If it was necessary

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[3] Dictum of Mr.Ong-Art Klampaiboon, MP and the top member of the Democrat Party.
[4] He was a Deputy Prime Ministers, minister of Interior and the chair of TRC subcommittee at the same time.

to arrange , It should arrange 1 public forum in each regional (5 forums, Bangkok included)"
(Bangkokbiznews,2012:14)

Nevertheless, After chaos in the House in June 2012 and for preventing pressures
from The opposition party ,People's Alliance for Democracy movement and other anti-
groups, Finally, The government decided and approved compromisingly of arrangement
"Public Forums Nationwide for National Reconciliation" (PFNNR). The author will clarify
the background of PFNNR in the next topic.

4. The background of PFNNR

The logo of PFNNR.(It is literally "dialogue for the way out of Thailand ")

The TRC subcommittee agreed to arrange "Public Forums Nationwide for National
Reconciliation" (PFNNR) by assigning PM's Office Permanent Secretary Mr.Thongthong
Chandrangsu as the President as well as Community Development Department ; Ministry of
Interior to be host in PFNNR, within 60 days committed but could extend for 2 times (each
time was 30 days). The PFNNR would start in June and July 2012. Suan Dusit Rajabhat
University would help evaluate data from the participates. The outcome of PFNNR would be
sent to the cabinet for pending to the House. (Khoasod, 2012:10)

The conceptual framework of PFNNR followed both the research of The King
Prajadhipok's Institute and The TRC report to raise the issues of "the fundamentals of
conflict" and to let people find the way out from those own minds.(World Today
News,2012:12) The government were confident that PFNNR would be "by all villages, all
people can participate creatively , search for the Thailand future collaboratively and propose
approaches or methods to solve the conflict problems that have been the first step to
peacefully conflict resolution. All of these, Thai society can lead to peaceful, merit, mercy
and justice society" (Matichon Weekly,2012:15)

Afterwards, PFNNR could not been arranged within a period of June and July, 2012
because of budget problems (Daily News,2012:3) , political problems, especially
constitutional amendment problem that constitutional court did not permit and other policy
making problems, specifically forcing on Thailand 2020 policy, investing policy for change
base structures in Thailand. These reasons affected PFNNR postponement. Next the
government declared to arrange PFNNR in January and February, 2013 but it was postponed
again. Finally the government concluded definitely that PFNNR would be arranged in June
and July,2013.

The TRC subcommittee entrust Suan Dusit Rajabhat University, former rector Associate Professor Dr. Sukhum Chaleysub , to select the target groups in PFNNR and summarize all issues resulted in PFNNR. Dr. Sukhum Chaleysub explained that 108 PFNNR could be classified from constituencies in Thailand by the target groups were selected and included all occupation groups in each constituency. There were the target groups about 200-300 a constituency, depended on population size. Dr. Sukhum also amplified that "because constituency was determined by accurate population and I saw constituency was variable to conflict in Thai society"

The target groups by selecting were as following : 1. the applicants (selected by drawing lots) 25% 2.the agriculturist (farmer, fisherman) 15% 3. the labors (employee, worker) 15 % 4. the state agents (soldier, policeman, teacher, education personnel and civil servant) 15 % 5. The industrial ,service, commercial sectors (business owner, entrepreneur) 8 % 6. the doctors and nurses 5 % 7. the students both in schools and in universities 5 % 8. the academicians and intellectuals 2 % 9. The community leaders (sub-district headman ,village headman, community representatives) 2 % 10. People organizations (NGOs) 2 % 11. the political sectors (MP, member of the provincial administrative organization or the municipality or the sub-district administrative organization) 2 % 12.the monks, the pious and religious leader 1 % 13. the mass media 1 % and 14. the others 2 %[5]

The selected above had meant if the target group of a constituency had 300 people, there were the applicants (selected by drawing lots) = 75 people. While all groups (except the seventh) must be 18 years old up. Most importantly, all must be interested in political situation and be ready for find the way out of Thai society conflict peacefully.

In addition; the moderators in PFNNR had been selected by provincial community development department. They were ,mostly academicians, hoped to be the neutral academicians but the local philosopher could be the moderators too. However, The PFNNR organizers believed in the academicians because they were "sophisticated and theoretical" capabilities and The PFNNR avoided of one-sided and partial moderators. All moderators had to be trained at least a day in Bangkok. Mr.Sukhum said "One day training is enough to create knowledge and understand" (Matichon,2012:11) Besides, the moderators were hoped that they should speak a little but listening to the participates more as well as collecting the participates opinions and taking notes.

Not only The government and The PFNNR organizers had much of expect. Similarly, The associated Professor Asadang Panikabutr, a consultant of PFNNR and the former rector of Ramkhamhaeng University , insisted that "The local is yours, mountain is yours so that If they are belonging to you, you should been taking care of. The PFNNR are at least 75,700 participates and gave a huge chance for all to talk. The mobilization of opinions in this case are very great because those opinions are real from people. Furthermore, investment 168 million baht (about 5.5 million U.S. dollar) must be worthwhile because the mobilization of opinions simultaneously is greatly interesting"(Matichon,2013:11)

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[5] the most urgent document of interior ministry at I.M. (interior ministry) 0310.4/ว.2067 the topic : "The Project of Public Forums Nationwide for National Reconciliation" documented of 16 May 2013

Taking into account all of above, It can be argued that the PFNNR is being the light channel to conflict resolution in Thai Society. In the following topic, the author will show research questions and methodology as well as scope of study.

5. Research questions, methodology and scope of study

The questions the author tried to study in this article are as follows: What background of the PFNNR ? How did the PFNNR locate in Thai society ? What did the author see significantly? What were the crucial problems and obstacles ? and if the PFNNR has problems, How could criticize academically? How should the author suggest the way out for reconciliation forums? Finally, How should propose some contributive contents and suggest a more compatible model for reconciliation making to Thai society?

To elaborate on all these questions, the author used some books, newspapers, review articles, manual books and the bureaucratic documents for knowing background and importance of the PFNNR as well as knowing correct data and primary data. The author also participated in the PFNNR as observer both a large public forum (about 600, 800, 1000 people gathered) in the morning and sub-public forums in the afternoon. The author recorded many details, interviewed state agents, moderators and the participates to consider how reconciliation concept was working on the PFNNR and to synthesize advantages/disadvantages and obstacles from this case.

The author participated in 2 groups of provinces, the twelve groups consisted of Khon Kaen, Kalasin and Roi Et provinces and the fourteenth groups consisted of Nakhon Ratchasima , Chaiyaphum, and Mahasarakham provinces.[6]

The following important question is why these 2 groups of provinces? The author not only realized the importance of size that comprised of 51 constituencies and the participates were hoped to be join at 10,200 people[7]. Politically, the people in these groups have been political stronghold The Pheu Thai party (the government party)[8].Many of them fought the political struggles both ,mostly the red shirts and the yellow shirts. There were political violent events in these areas. Likewise, there were many political victims and political prisoners charged such as offence of the emergency bill under Mr.Abhisit Vejjajiva

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[6]The author participated in Chaiyaphum province on 15 June 2013 at Chaiyaphum Rajabhat University ,the participates were hoped to be at 800 people. Participated in Kalasin province on 16 June 2013 at Kalasin Rajabhat University ,the participates were hoped to be at 600 people. Participated in Nakhon Ratchasima province on 20 June 2013 at Nakhon Ratchasima Rajabhat University, the participates were hoped to be at 1,000 people. Participated in Roi Et province on 23 June 2013 at Roi Et Rajabhat University, the participates were hoped to be at 800 people. Participated in Mahasarakham province on 7 July 2013 at Mahasarakham Rajabhat University, the participates were hoped to be at 1,000 people. And participated in Khon Kaen province on 10 July 2013 at North Eastern University, the participates were hoped to be at 1,000 people.

[7] The PFNNR had 2 days in Chaiyaphum province, the participates were hoped to be at 1,400 people. 2 days in Kalasin province, the participates were hoped to be at 1,200 people. 3 days in Nakhon Ratchasima province, the participates were hoped to be at 3,000 people.2 days in Roi Et province, the participates were hoped to be at 1,600 people. 1 day in Mahasarakham province, the participates were hoped to be at 1,000 people. And 2 days in Khon Kaen province, the participates were hoped to be at 2,000 people.

[8] Excepted 1 out of 5 constituencies in Chaiyaphum province and 7 out of 15 constituencies in Nakhon Ratchasima province.

government, carrying a weapon, attempting to fire ,terrorists and so forth. There were crucially deaths and many people in jail.[9]

The author wishes to understand the meaning of reconciliation from people worldview in 2 groups of provinces and personally, the author has worked in these areas that accessed the data from the state agents and the moderators more convenient than other areas.[10]

6. Research results and discussion

6.1 The details problems of the PFNNR

The details problems primarily were too fewer public relations because the PFNNR had frequently postponed from in June and July 2012 and from in January and in February 2013 to arrange in June and July 2013.It was not enough time to publicize. Likewise, some mass media in Thai society did not know who the organizers were.[11] Some participates did not know what forum they were coming. Furthermore, the PFNNR arrangement processes were too hasty and short-term for result conclusion before the House in August 2013. The other problems were period of expression of the participates in the morning too less, about 30 minutes between 11.30-12.00, that some participates showed those displeasure, or in Khon Kaen province had not been the sub-rooms in the afternoon and had not permitted the participates to talk ,because of too big room, by writing replaced to send to the moderators, some participates ,however could not write (the poor and the uneducated) , begged near people to write instead but they would like to talk more (some people traveled far away from their home to intend to talk). For them, talking could be shown more gesture language and emotional voice. In addition; the place problems, for example both in Kalasin and Roi Et province, the sub-rooms for dialogue were at the 4-6 floor, whilst the elevators were out of order, that were obstacles for walking upstairs of the elderly. The more details problem was disposition problem, some type of conflict dialogue, when people talk from those independent minds at a podium in front of the stage, normally, that should face to the moderators on the stage and turn those back on the audiences, for avoidance a confrontation. These did not have problem in 5 out of 6 province excepted in Roi Et province. There was a

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[9]Consider the political violent events in Khon Kaen province in   People's Information Center (The April - May'10 Crackdowns) : PIC,   Khwam Jing Pheu Khwam Yuttitham [Truth for Justice] (Banghok: PIC , 2012)pp.398-400. While   the political prisoners ,data updated on 30 May 2012, Khon kaen provincial Court had 29 prisoners, Phol provincial court (in Khon Kaen province) had 3 prisoners, Khon kaen municipal court had 18 prisoners, Mahasarakham provincial court had 29 prisoners, The juvenile and family court of Mahasarakham province had 9 prosoners, Nakhon ratchasima provincial court had 1 prisoner, The juvenile and family court of Nakhon ratchasima province had 1 prisoner, Si Kew provincial court (in Nakhon ratchasima province) had 4 prisoners, Si Kew (Pak Chong) provincial court (in Nakhon ratchasima province) had 1 prisoner, Bua Yai provincial court (in Nakhon ratchasima province) had 4 prisoners, Chaiyaphum provincial court had 4 prisoners, The juvenile and family court of Chaiyaphum province had 24 prisoners,
Phu Kheaw provincial court (in Chaiyaphum province) had 1 prisoner, Roi Et provincial court had 8 prisoners and The juvenile and family court of Roi Et province had 6 prisoners. (cited in Khwam Jing Pheu Khwam Yuttitham [Truth for Justice] , pp.906-1253)
[10] This reason was just supported for field research, it was not a crucial issue.
[11] For example, Matichon News said "The TRC , the House Committee on National Reconciliation and   the King Prajadhipok's Institute (Institute for Democracy studies) collaboratively arranged the PFNNR" (Matichon,2013) Despite all 3 above did not involved in the PFNNR.

chaotic event when a participant blamed many politicians who regularly buy the vote. Later a local politician, the chief executive of sub-district municipality, went to the podium and said irritably "I have never buy the vote in my area". The atmosphere was bad. Many people jeered him and one shouted that "there was not vote buying ! .It has been everywhere. All politicians like to invest and gain". There were some problems about audio and microphone quality, no water in the bathroom (in Mahasarakham province) etc.

Nevertheless, the author will explain the vital problems of the PFNNR from the little to the big important in the author view.

6.2 The vital problems of the PFNNR

The author classified 3 problems in the following:

6.2.1 The problem of grand opening ritual as "Thainess"

Whatever the grand opening speech in Thai society always has been given the host or the elderly or the money supporter, etc. to first talk as "the most important person". Whatever birthday party, marriage party, bureaucratic ceremonies, sports e.g. boxing, football etc., they normally take long time in talking (the first completes talking, the second or the third continues). Thai custom is not permitted to warn and interrupt if they are too talkative because of caring for their reputation. Thai society has known itself these traits as "Thainess".

The PFNNR did not an exception from "Thainess" umbrella. In Nakhon Ratchasima, Kalasin, Roi Et and Mahasarakham province, The grand opening speech were from the rector of each university, but all 4 rectors recently were appointed by those university council, they were too talkative and seemed to show vision of their university. In Kalasin province (the participants were not many), for example when the rector completed talking, I was at 10.00 am. The Kalasin rector called for people harmony and stated his university policy according to being recently appointed .He took long times for talking university vision , a number of faculties, university curriculum both the undergraduate and the graduate, a number of faculties to be opened in the near future, a number of present students and leveling up from Kalasin Rajabhat University to Kalasin University that has been pending in the parliament. He talked about 30 minutes.

Consequently, The PFNNR were too less time in the morning because there remained video opening about introduction of the PFNNR and the moderators discussion. These made people dialogue in limited time and could talk only a little bit. Some PFNNR, There were many of waiting in a long queue to talking. The moderators so that begged them to talk briefly because of lunch time.

6.2.2 The problem of the moderators

The problem of some moderators was too long talking and seemed more teaching and lecturing. A moderator told the author that "I am worried about people disharmony and discord after my speaking because of too much political conflict situation". He obviously misunderstood his role that he truly was a listener not speaker. Many moderators missed the point of The PFNNR goals, some taught Buddhist to the participants in Nakhon Ratchasima province, some talked irrelevantly that "To be good citizenship is to love harmony, we lose The Burmese–Siamese War and Krung Sri Ayutthaya was seized because of people disharmony. We should be humble, grateful and good personality", etc.

While, in the afternoon, the moderators had own different characteristics in the sub-room. Some let the participants to talk everything that they wished, some set the issues guided and the participants had to talk under those issues, some did not permit the participants to talk some institutions such as the monarchy, the military and the judiciary.

Interestingly, the author found a moderator who has taught at Khon Kaen University in The PFNNR of Kalasin province. All moderators would permit the observers to participate in the sub-room except him. Whatever reason he denied, that room, however, had not an air conditioner so that his voice could be heard. He was monologue and only lectured that the participants were unpermitted to talk. He took a long time to lecture about the constitution that has reversed democratic regime to dictatorship, for example, he raised a case of Adolf Hitler who came from electoral democracy but abused of power, etc. Please consider some pictures of The PFNNR in the morning and in the afternoon:

The PFNNR in the morning [12]

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[12] From Kalasin ,Roi Et, Mahasarakham and Khon Kaen province respectively.

The PFNNR in the afternoon [13]

Taking into account all of above, It might be hard and impossible to argue that the moderators should have been neutral and mature, they have seen the different worlds. However, Talking in the PFNNR, they should not like the state agents to indoctrinate and reproduce own those ideologies to the participants. Reproduction for whitewashing in the space as "pure, naive and neutral" as the educational institution (Althusser, 1971) to legitimize own those voices. As a result of these problems, The author therefore argues that these ways and methods from the moderators (or the state agents) could be only the national brainwashing project.

6.2.3 The problem of group qualification

There were rarely the public deliberations of the reconciliation issues to include all occupational groups in society to participate. The important point was to many people could express those thoughts differently, although some criticized about the budget and break-even point,[14] the author does not think like that.

The main idea that the author realizes is the limitation of the PFNNR relationship to reconciliation. All those occupational groups who are not the political necessity, the political victims and the political prisoners including many people who have been affected on political violence. Consequently, there were not both the moderators and the participants, who talked

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[13] From Chaiyaphum, Nakhon Ratchasima, Kalasin ,Roi Et, Khon Kaen and Mahasarakham province respectively. Please consider that there were not the sub-rooms in Khon Kaen province so that the participants could not talk but could write something to the moderators for conclusion to the board. However, in the afternoon, the authors did not took pictures in Mahasarakham province, the author cited that room in http://www3.cdd.go.th/mahasarakham/photonews/39/index.html (accessed on 14 July 2013)

[14] Consider the news "Mr.Abhisit Vejjajiva (the leader of the opposition party) is unfavorable people 's taxes ,if the government has arranged the PFNNR non-academically" cited in
http://www.democrat.or.th/th/newsactivity/news/detail.php?ELEMENT_ID=15083&SECTION_ID=29
(accessed on 14 July 2013)

about important reconciliation components for example, they did not talk about Truth seeking in political violence, 2010 or they did not consider how to do with the perpetrators or the political violent involved e.g. the upper commander, the military, the colors leaders. They also did not talked about reconciliation and amnesty, if amnesty, how to amnesty and how to understand deeply the routes of forgiveness. (Chaiwat, 1999 Thanet ,1999 and Nathiya ,2009) Importantly, how to do with the political prisoner and the victims who are still now in jails despite the fact that they are ordinary people? And how should restore them suitably except money giving? Should Thai societies reform some institutions that have involved in many violent events such as the military and the judiciary ? Should they study the violent foundation in Thai culture that leading to political violence in 2010? Likewise, should Thai societies open some spaces to memorize the traumatic pasts through the "sculptures" such as monuments, museums, public gardens, libraries, etc. for recording the past political violent stories as well as praying that those events would never happen again?

7. Conclusion

The authors proposes that "Public Forums Nationwide for National Reconciliation" are not good methods to reconciliation seeking and these forums are nothing more than government and parliament legitimacy making to consider reconciliation bills and amnesty bills in this August, 2013.The crucial problems have derived from Thai state views of reconciliation understanding that leading to the PFNNR being only "the ritual" by mass mobilizing. Furthermore, there have been not seen the reconciliation public forums in foreign countries that brought those occupational groups to participate. Because those worlds have been unseen the political violence like the political prisoner and the victims confronted. The routes to beg everyone to choose whether forgiveness needed, who can decide, it is not the state, not the perpetrators and not ordinary people, but the political prisoner and the victims. (Chaiwat, 1999)

Bibliography

Book

Althusser, Louis. (1971).   *Essays on ideology.* London : Verso.

Chaiwat Satha-Anand.(1999). *Apai Withee[Forgiveness]* . Bangkok: Pridi Banomyong Institute.

People's Information Center (The April - May'10 Crackdowns) : PIC. 2012).   *Khwam Jing Pheu Khwam Yuttitham [Truth for Justice].* Banghok: PIC

Thai TRC.(2012). *Rai Ngan Chabab Som Bhun TRC.[The full report of TRC].* Bangkok: Thai TRC.

The King Prajadhipok's Institute. (2012). *Rai Ngan Wi Jai Ruang Karn Sang Khwam Prongdong Hang Chat [Research on national reconciliation].* Bangkok: The King Prajadhipok's Institute.

Article in Journal

Bu-Ngah Tonyong. (2012). Song Khwam Prongdong [War on Reconciliation]. *Daily News.* (12 April):8.

Kowit Puang-ngam. (2012). Reu Ja Sang Khwam Prongdong Reu Peum Khwam Khud Yang [Either to reconciliation making or conflict making].   *Siamrath Weekly.* (2 April):43.

Narit Sektheera. (2012). Sun Tree Ya Jaraja [Appreciative Negotiation]. *Matichon.* (22 April):13.

Nathiya Ngamkham.(2009). Karn Meung Hang Apai Withee [Politicas of forgiveness]. *Thammasart Political Science Review.*30:1.

Seri Pongpit. (2012). Sun Tree Ya Sewana Kub Khwam Prongdong [Appreciative Dialogue and Reconciliation]. *Siamrath.* (25 April):6.

Thanet Wongyannawa.(1999). Apai Withee, Thewa Wittaya Karn Meung, Khwam Song Jam, Khwam Long Leum Tang Prawattisart [Forgiveness,Political Theology, Memory and Historical Forgetting]. *Thammasart Political Science Review.*22:1.

Yeaw Talalom (a). (2012). Sun Tree Ya Sewana [Appreciative Dialogue]. *Matichon.* (20 April):11.

Yeaw Talalom (b). (2012). Prongdong 2 [Reconciliation 2]. *Matichon.* (9 May):11.

Website

http://www3.cdd.go.th/mahasarakham/photonews/39/index.html. Retrieved July 14,2013.

http://www.democrat.or.th/th/newsactivity/news/detail.php?ELEMENT_ID=15083&SECTION_ID=29. Retrieved July 14 ,2013.

Organization Development of Thai Sangha in the Age of Globalization

Phramaha Yanakrit Chakbodin[1]

Abstract

The research aims to 1) to study the effectiveness of performance about Sangha Affairs Administration that consist of governing, educating, propagating, constructing, and public affairs, 2) to study about satisfaction of its members towards the effectiveness of organization via objectives and goals, 3) to study about organization development of Thai Sangha according to the principle of Buddhism, 4) to study the effect of globalization towards organization development.

It is found that 1)the Sangha governor by appointment have conducted the organization with knowledge and ability in the high level, 2) Sangha organization has run the education with full effort, 3) Propagation is still most important under the Sangha administration, 4) Sangha governor have enhanced the construction appropriately, 5) Helping society is the mission for Sangha organization in terms of collaboration to remove poverty, 6) ordinary monks are satisfied with the way of development of Sangha organization, 7) the Sangha executive understood the organization's reason, purpose, weakness and strength, competency and limitation, current situation, collaboration with others clearly in satisfactory level, 8) for the effect of globalization, it developed the executive visionary and modern way, 9) there is poverty increasing inside the Sangha community, 10) there is less participation to develop organization, 11) tt is partly material prosperity happening rather than spiritual prosperity, 12) the equality is less concerned, 13) modernization in the context of organization development is more popular than conservatism.

Keywords: Organization Development, Sangha Affairs Administration, Effect of globalization

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Introduction

The rapid change and growth in contemporary society influence many organizations responding and accepting it. This situation made organizations into the forms of complexity and diversity. Adaptation and adjustment can be seen in various levels in order to achieve the organization's objectives and goal. Necessarily, objectives and the other matters of organization must be changed related to the influence of globalization. Globalization takes important part towards organizations from both public and private sector in order to change into modern form to confront uncertain situations timely. To develop organization with new technique and tool has enhanced the competency regarding the organization's objective.

In the age of globalization, Thai Sangha organization or Mahatherasamakom is the highest to be concerned like others. Mahatherasamakom as the Sangha supreme council has concerned about the competition to achieve strategies in terms of uncertainty and rapid change. Even the Sangha Supreme Council is understood as conservative organization, this need is still inevitable for organizational struggle closely with the challenges presented by a fast-paced, highly dynamic and increasingly global economy. To compete and thrive, most of executives regard employee education, training and development as an important and effective part of their organizational strategy. Development of organization can be defined as a set of systematic and planned activities designed to provide its members with the satisfactions to evolve and stabilize the desirable performance.

In the context of Buddhism, Organization development can be found in the Sangha Society through the Sangha affairs. Regardless of whether that monk is an executive or a subordinate on an assembly line, Sangha affairs must be measured to analyze the effectiveness of organization . Change and integration for the long term plans and strategies has been used for an organization to ensure the efficient and effective performance of Sangha. Thai Buddhist Sangha has focused on the following1) Dhamma and Pali education and 2) Mental Development by concentration and meditation. The form of development has changed by modernization policies since the reign of the King Rama V (Chulalongkorn-1868-1910) following the economic development of government at that time. Nevertheless development has concentrated on modern concept rather than traditional concept. This leads to the question of how Sangha organization in Thailand confronts and complies with rapid change. Incidentally, Organization development is still an issue to be discussed within Sangha. Development of organization is needed as an agenda for Sangha to change inevitably.

Objectives of the Study

In the Sangha organization, the objectives of this research are as follow: 1) to study the effectiveness of performance about Sangha Affairs Administration that consist of governing, educating, propagating, constructing, and public affairs, 2) to study about satisfaction of its members towards the effectiveness of organization via objectives and goals, 3) to study about organization development of Thai Sangha according to the principle of Buddhism, 4) to study the effect of globalization towards organization development.

Definitions of terms in this study

For this study, Sangha and Sangha Supreme Council(Mahatherasamakom) are defined for proper understanding as follow;

1) The Sangha is a part—together with the Buddha and the Dharma (teaching)—of the Threefold Refuge, a basic creed of Buddhism. The Sangha originated in the group of disciples who renounced the worldly life to wander with the Buddha and listen to his teachings. After the Buddha's death his disciples continued to live together as a community, wandering from place to place, living off the receipt of alms.

The term Sangha means an assembly or a community. Here again, two kinds of Sangha should be distinguished, namely, the Savaka-Sangha, or the community of (noble) disciples, and the Bhikkhu-Sangha, or the community of Bhikkhus or monks. The former is also called the Ariya-Sangha, or the Noble Sangha (community of Noble or Truly-Civilized Ones), while the latter is also named the Sammati-Sangha, or the conventional Sangha.

2) Mahatherasamakom is the supreme organization of Thai Theravada Buddhism to govern and control the achievement of Sangha.

Research Methodology

For this study, it is about documentary research from Buddhist scripture and the related books. Documentary research can be analyzed to get the factual situation and solution for Thai Sangha. Meanwhile questionnaire and interview are used to measure the effectiveness of Thai Sangha Affairs Administration.

Population and Sample of the Study

Population of the study consisted of 500 monks and novices in Eastern part of Thailand. For this, they are the student of Buddhist university and living in this area. Out of these, 150 monks and novices are being drawn by using convenient sampling technique constituted the sample of the study.

Thai Sangha Affairs Administration

First of all, the function and role of Sangha are required to be understood. Main function of Sangha in Buddhism is to study the principle of Buddhism and comply with it; bringing Buddha's teaching among people in term of propagation. Today there are certain mentioned roles of Sangha. According to the Sangha Affairs Administration, there are responsible functions and roles for Thai Sangha appointed directly and necessarily as follows;

1) Governing aspects: it is a duty to manage monks and novices in monastery; by a monk who is knowledgeable and strong enough will become Sangha governor in various levels. Supreme Patriarch is at the highest position. The lower hierarchy is Sangha General Governors, Sangha Regional Supervisors, Sangha Provincial Governors, District Head Monks, Commune Head Monks, Abbots, Deputy Abbots and Secretary of Each Governor as the last position. Sangha Supreme Council (Mahathera Samakom) is the highest organization within two sects (Mahanikaya and Thammayut)

2) Educational Running aspect for monk, novice and general people; that are about administration and being a teacher in Buddhist education institutions i.e. Buddhist universities, Dhamma-Pali School and Non-Vocational education.

3) Buddhism Propagating aspects concentrate on Dhamma teaching, training, preaching, instructing, academic writing and practicing via various media such as Radio, TV, and Newspaper etc.

4) Buddhist Compound Constructing and Restoring aspect is meant that being caretaker of making and restoring monastery.

5) Public Servicing aspect for society is meant in participating in order to make benefit for society in various ways such as running education for poor children, anti-drugs activities, contributing fund to various agencies and enhancing personal profession etc.
Secondly, the role of Sangha in Thai society is as follows;

1) Running educational center for people particularly in university, high school and primary school etc.

2) By being a teacher in numerous educational institutions

3) Helping society in term of financial distributions for various agencies

4) Hospitalizing the poor people by providing treatment

5) By being a leader in order to develop community

6) By being a leader in order to solve the narcotic problem

7) Helping in term of constructing the government buildings

8) Propagating the Buddhist principle via mass media such as Radio, Television as the preacher, instructor, practitioner etc.

Lastly, according to Buddhist principle, there are six ways which Buddhist monks are responsible to follow, propagate, and spread directly namely;

1) Refrain people from evil

2) Encouraging people to do good

3) Be benevolently compassionate towards people

4) Teach people what they have not heard

5) Clarify people what they have heard

6) Point out people the way to heaven

As mentioned above, it is obvious that every member must comply with it in terms of effectiveness and well-being of organization and members. In domestic level, the performance is rather acceptable. But at international level, there are still controversial situations. Finally modern organization must concern about necessary changes.

Organization Development of Sangha in the age of globalization

Understandably, organization development as one of human resource development (HRD) is defined the process of enhancing the effectiveness of an organization and the well-being of its members through planned interventions. Organization development emphasizes both macro and micro organizational changes: macro changes are intended to improve the effectiveness of organization ultimately, whereas micro changes are directed at individuals, small groups and teams. Further, Sangha as macro level concentrates on success of organizational objectives in order to reach the following i.e. time, quality and output. Meanwhile as micro level, the factor of training and development of individual, small group (such as meditation center, Dhamma teaching school etc.), and monastic program for society (teaching Dhamma in school, Buddhist missionary etc.) are required.

Incidentally, it is the process used to enhance both the effectiveness of an organization and the well-being of its members through planned interventions. This definition makes three points. First, it enhances the effectiveness of the organization. Effectiveness, in this context is defined as achieving organizational goals and objectives. Second, it enhances the well-being of organization members. The term "well-being" refers to complete satisfaction of each organization of member. Generally, challenging and meaningful work leads to work satisfaction and if rewarded, it results in higher satisfaction as well.

Thus it is intended to enhance both personal and work satisfaction. Third, it is used to enhance the effectiveness of organizations and individual well-being through planned interventions. Planned interventions refer to the sets of structured activities in which selected organizational units (target groups or individuals) engage with a task or sequence of tasks where the task goals are related directly or indirectly to organizational strategies are the primary means through which organization improvement and changes take place.

Nevertheless, Organization development is considered as enhancing goals and objectives in the organizational level, it must show the exact indicator to strengthen organization. As for the organization members, it must be well-being including work satisfaction, reward, and so on. In addition, it also includes a task or sequence of task that are related to strategies of organization in terms of improvement and change.

Problematic Issue of Buddhism in the age of globalization.

Obviously, the role of Sangha has changed a lot due to the stream of globalization. It has made the world smaller than before and has mobilized several religions meet closer like it has never been before. Concentration on domestic role of Sangha to propagate Buddhism must be changed as fast as possible. In the stream of globalization, rapid change in society, economics and politics leads to misunderstanding of Buddhist monks in Thailand. They are not able to understand global change and cannot adjust themselves properly. Incidentally, they accept a change improperly and eventually and an element of religion has been distorted.

Moreover, after the decline of religion, instead of improvement, they keep thinking about being victim of globalization and respond with great anger. More often violence has been used against other religions or groups. This reaction made religion a problem in the field of International relations. In 20th century, Buddhism in Thailand used to be much confident and strong. Nowadays, they are losing confidence from people after the incidents of monastic scandal arose continuously. Most of Buddhist people suspect other religions and come out to blame that other religions are the cause of problem. It can be said that there are two issues that are happening. Firstly, the reaction toward social change that urged by globalization leads to disability of adjusting of Buddhism itself. Secondly, another religion plays increasing role toward Thai society in both internal and external factor. The mentioned misunderstanding and also adherence for the past are led to misinterpretation of decline.

As for Sangha organization**,** in late century, Sangha has played important role in order to modernize country by bringing modern education nationwide. New academic lesson and school system has brought to student and meanwhile learning Thai language and Publishing Buddhist Tipitaka and other texts surpassed other Buddhist countries in this region. However, today, Sangha has been following secular systems, not particularly in technology, but also in modern knowledge and material lifestyle. Violation of discipline and conflict, including discrimination of Sangha has been neglected widely. At the same time the number of people who are coming to monastery is decreasing, Sangha still isolate oneself from society by confining only to ritualism. Social relation or involvement with several people has been halted by phenomena and leads to no influence eventually. Nevertheless change may be the solution for developing organization.

Finding of the Study

- As for the effectiveness of Sangha affairs administration, it is found that 1)the Sangha governor by appointment have conducted the organization with knowledge and ability in the high level, 2) Sangha organization has run the education with full effort, 3) Propagation is still most important under the Sangha administration, 4) Sangha governor have enhanced the construction appropriately, 5) Helping society is the mission for Sangha organization in terms of collaboration to remove poverty.

- As for the satisfaction of members, ordinary monks are satisfied with the way of development of Sangha organization.

- As for the accordance with the Buddhist principle, the executive understood the organization's reason, purpose, weakness and strength, competency and limitation, current situation, collaboration with others clearly in satisfactory level.

-As the effect of globalization, it can be understood that 1) it developed the executive visionary and modern way, 2) there is poverty increasing inside the Sangha community, 3) There is less participation to develop organization, 4) It is partly material prosperity happening rather than spiritual prosperity, 5) the equality is less concerned, 6) Modernization in the context of organization development is more popular than conservatism.

Suggestion of the study

The study suggests that for the development of Sangha organization, 1) as the governing aspect, it should be purposive management, mutual help, no discrimination, righteous administration, workshop, focus on unity, good governance, 2) as for educating aspect, Educational enhancement, modernizing the education system, public participation for learning, focusing on secular and sacred knowledge, 3) as the propagating, reduction of conflict for propagating, developing body of knowledge, using technology to adapt Dhamma for lay person, 4) As the constructing, chance for collaboration, increasing collaboration and restore with the necessity of construction, concentration on constructing with no complexity. 5) Helping poor student regarding the goal of organization, establishment of foundation, providing the enhancement of welfare.

References

Anderson Donald L.(2012)*Organization Development: The Process of Leading Organizational Change*.United Kingdom:SAGE Publications

B.J. Terwiel(1984) *Buddhism and Society in Thailand*. India: Centre for South East Asian Studies.

Efraim Turban, Dorothy Leidner, Ephraim Mclean and James Wetherbe(2006) *Information Technology for Management: The Transforming Organizations in the Digital Economy*. Asia: John Wiley & Son Pte. LTD.

Hofman Eleonore, Youngs Gillian (2007) *Globalization Theory and Practice.* London: Viva Continumm.

Kondalkar V. G(2007)*Organization Development*. London: New Age International Publisher.

Malean Gary Neil(2006)*Organization Development: Principle, Process, Performance*. San Francisco: Berrett-Koehler-Publisher.

Mee-Yan Cheung-Judge, Linda Holbeche(2011)*Organizational Development: A Practitioner's Guide for OD and HR*. United States: Kogan Publishers.

Mourice Walshe(1996) The Teaching of Buddha(Long Discourses of the Buddha. A Translation of the Dīgha Nīkāya): Sigāla Sutta. Boston: Wisdom Publications.PP. 461-69

Randy L. DeSimone, Jon M. Werner, and David M. Harris (2002) *Human Resource Development*. United States: Harcourt College Publisher. PP.3-4

Ronald Inglehart (1997) *Modernization and Postmodernization*. USA: Princeton University Press.

Somboon Suksamran(1982) *Buddhism and Politics in Thailand*. Singapore: Institute of Southeast Asian Studies.

Thanissaro Bhikkhu (2001)*Refuge:An Introduction to the Buddha, Dhamma, & Sangha*. USA: Metta Forest Monastery.

Ven. Prayudh Payutto(1986) Sangha: *The Ideal World Community*. A lecture delivered in January at the Fourth International Congress of the World Buddhist Sangha Council. Bangkok: Buddha's Light Vihara.

Social Development Initiative Creating Significant Impact on Local Communities

NICHOL R. ELMAN[1]

ABSTRACT

Higher Education Institutions in the Philippines have been challenged and are called upon to shift gear towards societal transformation, to serve the poorest among the poor and the other marginalized sectors of the society. Of the traditional trilogy of functions (instruction, research, extension), this kind of social development process is done by Silliman University through extension. This is because "academic institutions cannot just stand like an ivory tower unmindful of the realities of the outside world."

The community extension initiative of the University operates through self-help, self-reliance and self-determining principles in an integrated manner, comprehensive in nature and sustainable in character.

In Silliman University, the major categories in conducting community development work are academe-based and community-based. The academe-based is characterized by community outreach activities undertaken by academic units in partnership with communities served through the Service-Learning approach, as a pedagogy of teaching.

Sustainable development is the main thrust of the community-based management ventures, which adhere to the principle of people empowerment through self-sustaining or self-propelling people's participation in their own community affairs. This simply means putting the management of development initiatives in the hands of the people.

In the case of Silliman University Comprehensive Integrated Rural Development (SUCIRD) program, it covers four-fold development components, such as <u>H</u> for health, <u>A</u> for agriculture, <u>N</u> for nutrition, <u>D</u> for development or HAND through community organizing strategy.

The SUCIRD project has encountered certain development issues and concerns as experienced by the client-system (community) and the agency-system (Silliman University). These constitute some of the social, economic and cultural inhibiting factors such as the low level of participation, inadequate technical skills, environmental degradation, lack of agricultural production resources and mismanagement of livelihood projects, among others. This development initiative gives the community partners a chance to manage their own

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community affairs, thus it is expected that in the project institutionalizing phase, the trained local leaders would carry on its management operation.

Through this holistic approach to development, Institution of Higher Learning, like Silliman University, must always be conscious of its moral obligation and social responsibility to the larger community.

INTRODUCTION

As a mandate of government, academic institutions' centerpiece is directed towards holistic human societal transformation, developing people through the process of building human infrastructure or social engineering both within and in the larger community. They should exert more efforts to reach the depressed communities. Therefore, development thrust of institutions of higher learning should be in an integrated and collaborative manner, comprehensive in nature and sustainable in character, through interdisciplinary and participatory approaches.

In order to be called an institution of higher learning worthy of its name, the traditional trilogy of functions must be mutually coherent and interrelated with each other. Through this development process, the theories learned and knowledge acquired in the classroom is put to actual practice, drawing new information and adding it to the body of knowledge. Research work is of no use if not being tested or applied. Likewise, application of research findings without proper documentation would also become useless if it could not be translated into new knowledge.

The Development Perspective

A.H. Bunting aptly says, "development is a state of being when the people will, in the end, be more free than they are now to pursue happiness." This may simply mean that through self-enhanced activities of the people, they are able to derive a certain level of satisfaction. However, such development enhancement may require facilitative intervention, either from within the community or from the outside, through social education and technical training. This is what James Yen advocates, "it is education through reconstruction and reconstruction through education." Thus, through this educational process, the partner communities will be taught how to cope with a wide range of situations, giving them the opportunity to build their capacity to achieve self-realization in life.

However, Lumanta and Cuyno (1979) stress that this "requires thorough understanding of the meaning of development and the role of change agents in the process". They further emphasized that "development is a total social process which includes the economic, social, political and cultural aspects." Some educational institutions however, stress the need for the spiritual facet in the total development of a person.

Developmental Philosophy and Principles

The Chinese philosophy states, "if you give a man a fish, he can only eat fish for one meal; but if you teach a man how to fish, he can eat fish throughout his lifetime." This philosophy is being carried out in the rural communities to develop self-reliant communities through the self-help principle in extension. This means that the extensionist or community organizer shall work with the people by providing them the opportunity to help them help themselves, always conscious that the process of human development takes time and moves slowly according to its natural pace. The change agent does not assume that he or she knows or has ready answers to the community needs and problems, but instead serves only as guide or facilitator, or merely doing a catalytic role in the development process.

Institutional Vision, Mission and Goals

The vision of the Silliman University community outreach program is to make the community "a transformed, empowered, and self-reliant community living in harmony with the environment". To translate the vision, the university serves as the catalyst in the process of attaining sustainable development and empowerment by addressing the priority needs of disadvantaged communities. Extension work or service-learning activities serves as the opportunity by which faculty and students apply their technical know-how to practical-do-how and also becomes a venue for generating more knowledge enhancing instruction.

Development Process

The main focus of the community-based development initiatives of Silliman University is sustainable development of its partner-communities. Being community-based, the extension project adheres to the concepts of self-reliance, and self-help through people's participation and community management in coastal, lowland and upland resource management. This means putting the conservation and management of resources in the hands of the people. The partner-communities will be provided with the opportunities to develop their skills and capabilities through sequential series of social education and technical training for them to better understand the various development concepts and principles, community organizing, rural development management and cooperative principles and practices, among others. This will enable them to develop further a sense of community.

The main role of the development extension is to facilitate the mobilization of the different communities and development stakeholders within the coverage area to include the LGUs, the NGOs, existing POs and the local residents.

Geographical consideration and scope in selecting partner communities

The community outreach program of the university makes it a point that its development initiatives with the social system must compliment the development efforts of the local government units in far-flung barangays or villages in the Province of Negros Oriental, Philippines. The community organizer or extensionist may work in close coordinative efforts with local government units, because the latter can make or unmake any development initiatives if not involved at the inception stage.

The type of individuals or groups chosen for any development assistance must come from the poor and depressed communities based on its socio-economic profile. They may be farmers, fishermen, homemakers, mothers, out-of-school youth, cottage industry workers, among others. As pre-requisite, the higher learning institution has to be invited by the community to work closely with the group needing assistance in a joint effort of developing themselves.

Figure 1. Development Partnership Paradigm
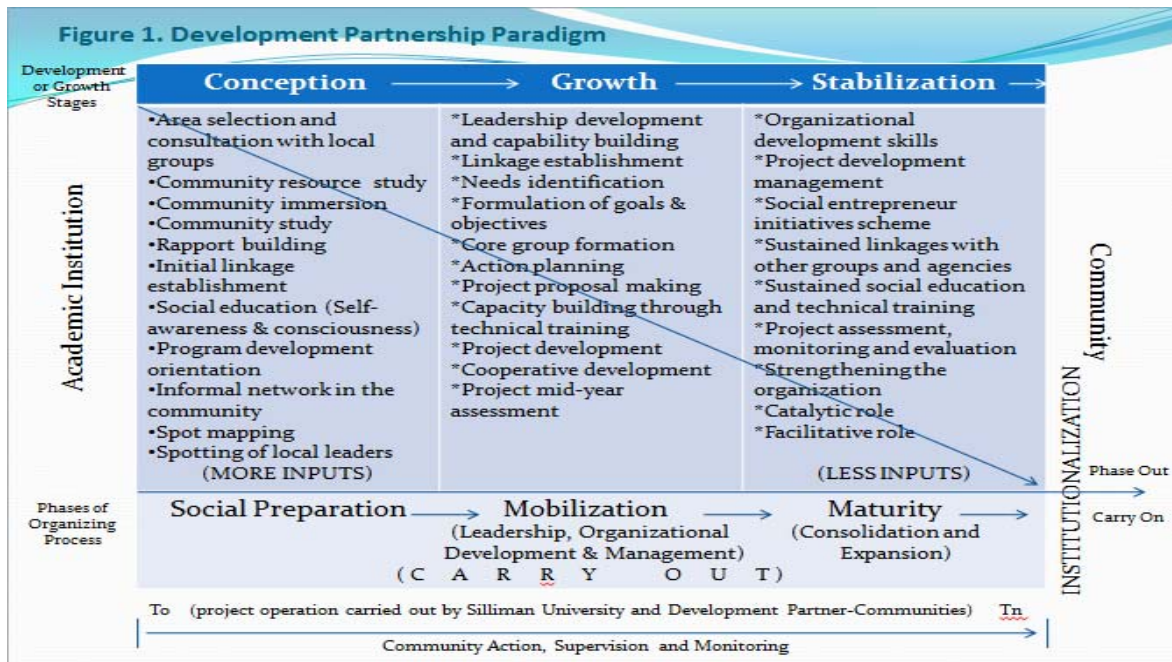
Rural Development Partnership Paradigm

Cognizance of the Vision-Mission-Goals (VMG) framework, the Silliman University Extension Program (SUEP) has always been conscious of the development partnership between the agency system (SU) and the social system (community stakeholders) in the implementation of community extension projects or in doing service-learning activities in the community it serves. The evaluation of the participation of Silliman University and the development partner communities, takes place from project inception stage to project stabilization stage, whereby the partner communities will now fully take over the entire leadership in their community affairs, while Silliman University will move on to serve other deserving communities. However, the previous communities served will still have inter-active relationship with SUEP on consultative basis.

The Development Strategies

As a process, organizing has four interrelated development phases as shown in Figure 1. Results of each phase determine to a large extent the content and methods of the succeeding phases, though the different phases overlap.

In the conception stage, knowledge of the community is of primordial interest for both major stakeholders (HEI and community partners). Thus, situational analysis takes place before the other parts of the project development cycle will follow, such as formulation of objectives and setting of approaches and methodologies, project execution, monitoring and

evaluation. The various academic units may determine their involvement in the community, according to their field of expertise and resources available. Please refer to Table 1 for the Matrix on the Situational Analysis Framework.

Table 1. Matrix on the Situational Analysis Framework

NEED	BEHAVIORAL OBJECTIVE	CRITICAL ACTIVITIES	PERSONS / UNIT RESPONSIBLE	EVALUATION
Situational Analysis: 1. Community Study and Immersion	- To know more about the place, its people and the existing resources as basic information necessary in facilitating the social preparation phase. - To establish rapport with both formal and informal leaders, the youth leaders and other sectoral or interest group leaders	- Courtesy call on local leaders - Home visits - Informal interactive encounters or meetings where people go, work and play. - Conduct informal interviews when rapport has been established and - Identify community volunteers for the conduct of community survey - Conduct actual community survey or profiling	-Education -Social Work -Sociology/ Anthropology -Psychology - Biology -Entrepreneur-ship - Nutrition and Dietetics -Economics -Community Health Nursing or Public Health Nursing - History and Political Science -Engineering -Marine Institute -Medicine -Mass Com -Law -School of Public Affairs and Governance -Divinity -Computer Center	Participatory Community Assessment (PCA) -To assess and examine the extent of work done through focus group discussion and interactive session based on the following: 1. Revisit the behavioral objectives 2.Examine the critical activities done 3.Identify inhibiting factors (problems encountered) in the process and how were they resolved 4.Determine enhancing or facilitating factors in the process -Submit reports and documentations
2.Community Profiling	-To understand some of the community's issues and concerns -To identify felt needs of the people -To describe community profiling in terms of demographic and socio-economic characteristics of	- Hold informal focus group discussion - Document people's perception, expectations and apprehensions about development initiatives - Enlist potential		

NEED	BEHAVIORAL OBJECTIVE	CRITICAL ACTIVITIES	PERSONS / UNIT RESPONSIBLE	EVALUATION
3.Tasking by academic units	the local residents -To identify potential leaders among the youth, the farmers, the fisherfolks and the women sector in the area. -To determine which academic units of the university will cater to the particular need of the community	community organizing volunteers or community facilitators to be trained further -Interpretation and analysis of data -Community presentation and validation on results of survey -Draft Development Plan of Action, considering development strategies and identifying , level of academic units' involvement -Community presentation of action plan		

The approach in project development started with the project inception or conception stage to growth and stabilization stages. In this regard, the community people were trained to prepare them to lead in planning and implementing viable alternative development scheme. The community was given social education, emphasizing on self-awareness, social consciousness and value reorientation. In order to strengthen the capability of the client-partner community, they went through group strengthening sessions on team building to draw experiences and generalizations therefrom. The training facilitators have undergone internalizing development experience with the local communities to bring about a pleasant atmosphere characterized by esprit-de-corps and mutual understanding among the community members.

Technical training like leadership and managerial skills were given to the group to prepare them for community leadership. Development concepts and principles, cooperative practices and financial management formed part of the technical training to equip the local leaders with the appropriate skills to manage their own livelihood development projects. Micro-enterprise management training was also included in the rural community curriculum to give them the chance to make development options on how to enhance their socio-economic condition.

The community extension projects were regularly monitored by the project staff. Periodic internal project assessment were done to know the direction of the project operation, and to identify issues confronting the project staff and the client-partners in the process of working together to attain project goals. Project monitoring also allowed the project management to know the status of its field operation as basis for redirecting the development strategies and techniques for the succeeding year.

Project Assessment and Evaluation

The Quadrangulation Appraisal Technique or "QUADRATECH" (Elman, 1993) is a research methodology which has been used by the Silliman University Extension Program in community assessment and in evaluating rural development efforts (see Fig. 1).

Figure 1. The Quadrangulation Appraisal Technique (QUADRATECH)
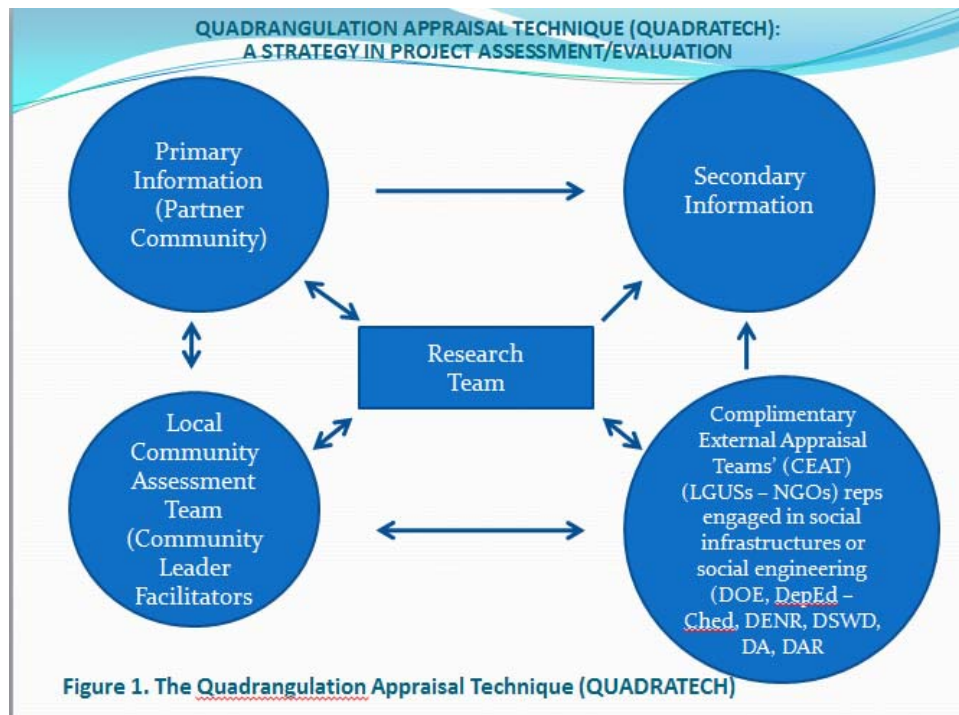
The QUADRATECH constitutes a paradigm shift from the conventional community survey which uses only the interview schedule or the questionnaire. This approach involves not just the gathering of primary and secondary data, but also the participation of the local community leaders/facilitators, the Complimentary External Assessment/Appraisal Team (CEAT), and the involved collaboration of the partner-community in a constantly interactive relationship (Elman and Pioquinto, 1997).

The diagram schematically describes the interrelationship between component parts of the research process. In this diagram, the research team is aided by the following:

1) The primary data collected by the interviewing team using structured interview schedule and the participation of partner-communities.
2) The secondary data such as periodic progress reports and process documentation lodged in the various concerned inter-agencies, among others.

3) The local community leader-facilitators such as the barangay nutrition scholars, barangay health workers, leaders of civic and religious organizations in the partner-communities who will gather and validate the primary or empirical data, and

4) The Complimentary External Assessment/Appraisal Team (CEAT) composed of interagency representatives (both GOs and NGOs) who will provide the critical perspective on the data and will serve as potential sources of technical assistance.

THE SILLIMAN UNIVERSITY COMPREHENSIVE AND INTEGRATED RURAL DEVELOPMENT PROJECT (SUCIRD)

The SUCIRD Project focused its varied project activities either coastal resource management, farming, fishing, entrepreneurial initiatives, health and nutrition and community organizing or cooperative development that involved the client-households. This experiential learning has been based on the last 35 years (1978-2013) of the development extension work of the Silliman University Extension Program in the rural communities through collegial, concerted and coordinative efforts between the change agents and the development partners. The main purpose of the SUCIRD project is to improve the quality of life of the people in the partner-communities.

It is comprehensive because the various elements of development are being considered such as health, agriculture, nutrition, education, environment or ecology and spiritual or moral facets. It is integrated in the sense that the expertise and facilities of the learning institution are pooled together to be of greater service to others.

The community organizing scheme allows the people to identify their needs and problems, to find solutions to their identified problems, make decisions and to implement the same with the "live-in" extension workers serving as guide, catalysts or facilitators.

Purpose of the Development Study:

This paper deals mainly on the following aspects of the community development work under the auspices of the SUCIRD project:

1. Description of certain aspects of the project operation in terms of development strategies and approaches;
2. Identification of some organizational problems and/or issues encountered by development partners;
3. Description of certain behavioral observations noted among the development partners;
4. Formulation of guidelines for operationalization of rural development projects of institutions of higher learning.

In all of these development strategies and approaches, the bottom line is, the learning institution like Silliman University is able to continue touching lives out there in love and service. It is then envisioned to replicate the results of this project in other areas of the province of Negros Oriental and elsewhere in the Philippines;

Significance of the Development Study

For Higher Education Institutions (HEI)

The Commission on Higher Education in the Philippines may be able to assist institutions of higher learning in the Philippines to further develop and attain its full potentials in serving the larger communities.

For Extension planners and implementors

The successes and failures of academic institutions extension (E) initiatives may open the door of opportunity for planners and implementors to modify its development approaches and strategies to meet the needs of community partners.

For the body of knowledge

That insightful experience drawn from the development process and learning ventures may contribute to the body of knowledge in rural development.

For operationalizing rural development initiatives:

Based on the field experience following the development process, certain guidelines may be formulated for learning or any development institutions to operationalize their rural development initiatives.

The SUCIRD Development Process

The point of entry of the SUCIRD program implementation in its holistic and integrated development is through household approach such that the individual members of the family contribute to its development.

In the 1970s and early 1980s, the SUCIRD program's built-in components are four-fold, namely: "H" for health, "A" for Agriculture, "N" for nutrition and "D" for development through the community organizing strategy (Marina Clinic experience in the rural extension action for community health in 1973 and adopted by the SU Comprehensive and Rural Integrated Development in 1978) up to the present.

The SUCIRD implementation strategies and approaches motivated the development partners to involve in the decision-making process pertaining to the project activities.

The involvement of the members of the family in the following project components are categorized as follows:

HEALTH. Some mothers were trained to assist the medical team conducting health clinics or medical mission in the locality. Traditional <u>hilots</u> in the community were given values education and additional know-how in basic health care services and referrals of patients with health problems. The Barangay (Village) Health Workers (BHW) in the area have been given refresher courses to enable them to effectively and efficiently deliver primary health care services to the people.

AGRICULTURE. Most of the cooperators were mobilized for the promotion of the food production aspect of the SUCIRD program. The agricultural component activities are labor-intensive wherein the farmer-partners were motivated to establish soil conservation measures such as contour farming, planting hedges and napier grass on the contour bunds. Some also engaged in cooperative development, in swine and poultry raising, goat and carabao (working draft animal) dispersal project in the area.

NUTRITION. The mothers were involved in the children's feeding program. They planted vegetables in their homes to supplement the corn soya milk (CSM) being provided by the Department of Social Welfare and Development (DSWD). Lactating and pregnant mothers were also included in the feeding program on a self-help basis.

DEVELOPMENT. The social education aspect takes precedence over the technical training in the development process, thus continues to enhance the knowledge and skills of the development partners in managing projects. The knowledge and skills of the project development partners are applied in actual practice. Thus, enabled them to have somehow change in their attitudes towards local community participation.

CERTAIN IDENTIFIED ORGANIZATIONAL ISSUES AND CHALLENGES

As part of the development efforts of the SUCIRD project, certain issues and problems have been encountered by the people's organization's (its leadership and member-constituents). Sources of the various information were taken from direct participant-observation from the report of the Complimentary External Assessment Team (CEAT); from the documentations of the yearly participatory community assessment; from the updated reports of the SUCIRD project staff and from the five-year assessment proceedings based on the project reference framework. CEAT is the fourth method of the Quadrangulation Appraisal Technique (QUADRATECH) (Elman 1993) to supplement the primary data collection, secondary data and the project HAND Team Extension workers unstructured interview in gathering information through personal intuitive approach (Sheer belief on respondent's statements).

1. **The Social, Economic and Cultural Factors**

Black propaganda. In the early stage of the SUCIRD project's implementation, black propaganda against the development effort was apparent in the communities. The project staff assigned in the area were allegedly branded as "left-leaning" or "communist-inspired." In order to overcome this social pressure, the extension workers assigned in the area just ignored the unfounded accusations until it just died a natural death.

"Wait-and see" posture attitude. Some residents of the community at the conception stage were on a "wait-and-see" (posture) attitude. They were at first hesitant to join the project activities. Instead they waited for others to accomplish something first before they would follow. In this regard, the project implementors were just patient enough to continue building rapport with the rural folks.

"Ningas cogon" attitude. Another cultural characteristic is the "ningas cogon" (only good in the beginning but such enthusiasm gradually dies down) attitude of some development partners. In the KAUGMARAN (a coined word taken from Visayan Term "Kaugmaon" and the Tagalog term "Kaunlaran") experience (1988-1993) in the Municipality of Siaton, Negros Oriental, the record shows that at the project inception a total of 285 community residents responded to the initial rapport building activities. However, the actual strength was about 120 members, more or less, because the rest were not so enthusiastic about actively involving themselves in the project. As an alternative option, the project management, continually give them values education and team building activities.

Low level of education. In this regard, the report shows that more than 60 percent belonged to the low education category. This means having attended only the primary and /or intermediate education level. Thus, the development partners were given reorientation sessions giving importance to social education through the non-formal approach to learning.

Lack of capital for investment. As regards the economic factors, the record shows that the development partners were in dire need of capital for their livelihood investments thereof. Middlemen has been controlling the business environment and still prevailing within the community served. The cooperators have been enjoined to "use indigenous resources as long as feasible." The issue of lack of capitalization was partly resolved by the development partners themselves through their own initiative.

Environmental degradation. In the case of the ecological concerns, the issues at hand are as follows: the "wanton degradation of forest which led to loss of watersheds" in the upland communities; "prolonged drought inflicting damage to crops"; "destruction of coral reefs;" "presence of big fishing boats" known as foreshiner despite municipal ordinance prohibiting their fishing activities in nearshore, and the " massive use of pesticides and inorganic fertilizers which affect marine life." To overcome these environmental concerns, the SUCIRD project has exposed the farming sector to a cross-country exchange study (CCES) program to observe the social forestry project in the hinterland of barangay Baslay, Dauin, Negros Oriental. The CCES program is a mobile learning experience for development partners to draw insightful experience from the extension development work of others. They were encouraged to plant forest trees as part of its reforestation program. The cooperators were urged to initiate activities related to conservation of resources for both marine life and in forest development and have been enjoined to practice the bio-intensive farming technology.

Low level of participation. The general consensus of development partners indicated the low percentage of participation in organizational meetings because they were pre-occupied in their household chores and other family small-scale enterprises. What the leadership of the people's organization did to overcome this situation of dwindling people's participation was to institute the following reforms: 1) instituted sanctions like fines as a matter of policy. 2) conducted closely monitoring of member-cooperators' entrepreneurial activities 3) held

periodic refresher courses on values education and group building in order to enhance their life values.

Non-compliance of organizational policies. Another problem is the "lack of will" by the officers of the people's organization to implement in full force organizational policies and sanctions. This means that there could be laxity on the part of the rural leadership in implementing their organization's policies. One classic example of non-compliance of the organizational policy is the "allocation of one (1) percent of every livelihood project's net income to the barangay health workers (BHW) who have been deputized by the local district hospital. A periodic review of organizational policies must be done to ensure its efficient implementation thereof.

Overlapping of functions. Some officers of the people's organization have failed to internalize or understand their duties and responsibilities which may have resulted to an inevitable overlapping of functions. For instance, in one of the people's organizations in the client communities, the board chairman also acted as marketer of the marketing cooperative. It simply shows that the different committees of the cooperative were not functioning so well as expected of them.

Inadequate management skills. The updated report of the SUCIRD project indicated some organizational management problems, such as lack of managerial skills and technical know-how among the officers of the organizations responsible for the various projects. On this regard, the SUCIRD project staff conducted Project Management Skills training which included simplified bookkeeping and auditing as well as recording practices.

Mismanagement of Resources. In the consumerism project, the consumer's stores of the people's organizations have experienced loss of profit due to the alleged "malversation of funds of the previous storekeepers." However, the malversed funds have not been settled by the alleged culprit. This means if not collected, it would remain as bad debts of the people's organization, which may cause the eventual death of the enterprise.

Needs of early childhood. Most of the Pre-school centers concerns was on the lack of construction materials due to inadequate funding source. The center building is counterpart of the local community and families without children enrolled therein may not have been motivated to help. Thus, it took time for the Pre-school building to finish its construction. On the other hand, there was lack of feeding supplements to cope with the number of malnourished children in the area. The day care teachers had to link with the local DSWD and DOH offices for the feeding needs of the pre-school children.

Lack of agricultural production resources. In the case of the farmer-cooperators, their problems were the following: a) lack of farm tools and implements, b) lack of working (draft) animals and plow implements, c) lack of chemicals for pest and diseases of crops, and d) lack of supplementary feeds for the swine raising project.

Bio-intensive farming technology or organic farming was introduced to avoid the use of chemicals. The farmers group negotiated also for the purchase of farm tools and other implements.

<u>Fishery production issues.</u> For the fishing project, particularly the <u>Patulay</u> (drift net fishing), the bookkeeping work has not been monitored well. One of the small <u>bancas</u> (boats) with its fishing nets were stolen and could never be traced anymore. The officers of the fishing group could not provide enough time to follow-up the fishing activities. The fish catch reports of the funding group were allegedly misrepresented. The <u>Pamo</u> deep fishing project lacked "<u>buso</u>" or fishing maestro's aide. Two of the "<u>buso</u>" helpers have not attended pre-membership seminar. Though, this problem was taken care of by the officers of the fishing group managing the <u>Pamo</u> project. This economic enterprise eventually met its natural death due to misunderstanding among the project management personnel allegedly caused by mismanagement of project funds.

<u>Incapacitated Extension Workers</u>. Some extension workers' inability to communicate with the people in the communities served could be due to lack of communication skills in building rapport; absence of institutional hiring guidelines, and their lack of passion to work with development partners, thus adversely affecting their linkages with other networking development agencies. It would take time for the concerned extension workers to grasp the development principles and its subsequent application to real life situations at the field level. Extension workers must possess pleasant personalities who are socially and technically equipped to face the rigors of development work.

Motivation is an essential factor in hiring people in development work. Davis and Newstron (1989) stressed that motivation combined with abilities together determine a person's potential performance in any activity. It further stressed the fact that motivation results from a person's attitudes reacting to a situation. Persons with altruistic attitude would make an excellent extension worker, because altruism, which is the "desire to do good may be a motivational factor" (Resurrection 1975)" for men to premeditated action" (Maslow 1954).

DESCRIPTION OF CERTAIN BEHAVIORAL OBSERVATIONS AMONG DEVELOPMENT PARTNERS

Certain behavioral observations were noted among the development partners which were gathered through personal interview as a participant-observer; observations by the SUCIRD project staff utilizing the available secondary and from the observations report of the complementary external assessment team or CEAT.

<u>Development of teamwork and cooperation</u>. The "bayanihan" spirit of working together for the common welfare has been enhanced among the development partners as manifested by their pooling of production resources in their upland communal farming and their participation in the development cooperative (consumerism and marketing) activities. In the process, a sense of belongingness has been developed towards the pursuit of economic productivity through their various livelihood development projects. For instance, the volunteer project staff composed of selected member-cooperators have willingly offered their time and efforts to serve in their various livelihood projects despite receiving only a minimal honorarium. The development partners have clearly understood that labor cost is their local

community project's counterpart. Another example of the spirit of comadire or love of working together was manifested by the cooperators' pooling of human resources in transferring a Consumer's store to its present site.

Women's sector of the people's organizations also played active role in the different social and economic project activities as volunteers either:

Table 2: Some roles of women in the affairs of the organization

Social	Economic
As health workers in the communities As day care program teacher's assistance	As storekeepers of the people's consumer's project
As officers and committee members of the people's organizations	As marketer of products from livelihood projects As project aides of the skilled workers, such as bamboo craft making, among others
As assistant in herbal medicine preparation and health and sanitation program in the localities	As bookkeeper of their economic projects

Loss of the sense of territoriality. In the SUCIRD project experience, the member-cooperators in one barangay would readily make themselves available to assist the projects of other barangays. Or, any interested member-cooperators of the other barangays covered by the SUCIRD project would take active part in the different projects being carried out by any of the people's organizations. They have developed the sense of rendering services to any of the clientele communities through the different livelihood projects and socially-oriented community-based projects like Day Care Center and barangay health services, among others.

For instance, when the hand tractor of the people's organization in Barangay Sumaliring of the Municipality of Siaton, had a major engine damage, the leaders of the project in barangay Giligaon agreed to lend theirs to continue serving their rice farming community.

SUCIRD Linkages with Agencies. The linkage establishment and networking with different related agencies may have contributed to the sustainability of development effort. In this case, the SUCIRD project staff networked with the following government agencies:

1. The Provincial Government's Office of Agriculture through the Provincial Governor, has spared 12 (Anglo Nuvian) goats for dispersal in the SUCIRD project areas.
2. The Municipal Government's Office of Agriculture in Siaton through the town Mayor assigned an agriculturist as its counterpart extension worker. The municipal agriculturist closely worked with SUCIRD project team workers in the area during the initial stage of the social preparation. This was done to enhance the rapport building between the project staff and the people served.
3. The Department of Health had accredited the trained barangay health workers in the clientele areas and were hired with a minimal monthly honorarium. The SUCIRD project health extension worker had linked with the local government units (LGU), Rural Health Unit (RHU) midwives assigned in the clientele barangays.
4. The Department of Social Welfare Development (DSWD) was tapped in the establishment of the Day Care Centers in the clientele barangays. The SUCIRD

project staff clientele trained the Day Care teachers assigned to the clientele barangays on the situational approach to early childhood education, values education and on rural leadership and organizational skills.

5. The Department of Environment and Natural Resources (DENR) for the tree seedlings, coffee and cacao seedlings dispersed to interested SUCIRD project cooperators in the interior hilly portion of the clientele areas.

6. The then Department of Education, Culture and Sports (DECS) for the use of classroom facilities in the elementary schools in the clientele areas for the different seminar-workshops conducted.

7. The Department of Labor and Employment (DOLE) for the registration of the different community people's organizations so that they can be given legal personality to engage in various livelihood projects such as consumerism, credit facility and other service-type cooperative ventures.

8. The then Philippine National Oil Company (PNOC), particularly the Environmental Management Division (EMD), for facilitating the social forestry cross-country exchange visits and for actual demonstration on mango grafting.

SUCIRD intra-organizational linkages. The SUCIRD project had closely coordinated with the different academic units of Silliman University whose facilities, expertise and services were needed by the project, namely:

1. The College of Business Administration for conducting the feasibility studies of the rural people's projects like the Deep-sea fishing project, the Rice, Corn and Cassava mill project, among others. The SUCIRD project staff used the training handbook and the skills learned from the said college on simplified bookkeeping;

2. The Biology Department and the Marine Laboratory for the lectures on marine conservation and preservation of resources;

3. The Social Work Department for the graduating interns assigned in the area to conduct case studies on individual cooperators, group of cooperators and the community as a whole;

4. The Institute of Development Extension (INDEX) offering Masters of Arts in Extension Administration (a program funded by the Fund for Assistance to Private Education (FAPE) for their student's field exposures.

5. The Marina Clinic, the health extension project of Silliman University, for the training of the village health workers and conducting health clinics in rural areas.

6. The Business and Finance Office for the financial management of the project funds following strictly its accounting and auditing procedures.

SUCIRD inter-people's organizations linkages. The following organizations have become learning facilities for community leaders' field exposures:

1. The Sandulot Siaton Negros Irrigators Association (SSNIA) as an expansion project area in terms of livelihood development project of the people.
2. The Baslay Farmer's Association in Dauin, Negros Oriental and the Pagang Farmers Association of Siaton, Negros Oriental for the cross-county exchange visit system on upland and agro-forestry development.
3. The Balaas Farmer's Association in Manjuyod, Negros Oriental, on the Integrated Upland Farming and the community-based waterworks system.
4. The Boloc-boloc Dauin Multi-purpose Cooperative and the Boloc-boloc Farmers Association for their livelihood development projects.
5. The various Kaugmaran (Progressive) Child Development Centers in the Municipality of Dauin, Siaton and Valencia, Negros Oriental for their daycare programs.
6. The Alternative Livelihood for Women in Negros Oriental (ALL for WIN) for their anti-poverty community development initiatives.

The strong linkage with GOs-NGOs-POs means that the organizational leadership has learned to support the projects of the other people's organizations through the principle of complementation and collaboration. This is the essence of networking to ensure rural development sustainability.

Monitoring Scheme of the SUCIRD Project. One of the monitoring schemes is the holding of an annual participatory community assessment (PCA). In this manner their local leaders were involved in reviewing, assessing and analyzing organizational issues and concerns of the project.

Every year participatory community assessment were done to look into the project accomplishment, problems and concerns of the organization's immediate past year's performance. Involved in the PCA are the Board of Directors, standing committees and officers of the different sectoral groups. This activity was done through workshop based on the following questions:

1. In your own opinion, what do you think were the goals of your organization in the immediate past year?
2. What were the activities done by the organization in response to each goal set forth at the beginning of the (immediate past) year?
3. If these were your activities, what then were the problems encountered in the process of attaining each goal and the possible causes for each problem?
4. What were the interventions done to right the wrong, if any?
5. What would be your plans for the succeeding year as a result of the previous years' experience?

During the plenary session to deliberate the workshop output of the different training groups, the leaders took turns in interpolating and interrogating the discussants. Stress was made on why the problems occurred and how they were resolved. Recommendations of the rural leaders enabled them to come up with better solutions to every problem raised.

This process may be very enriching among rural leaders in the sense that this would allow them to feel the importance of managing their own community affairs and assessing their performance based on the goals set by them. The project cooperators should know how to plan, implement and evaluate their project activities through the PCA approach. Such experience would greatly aid the development workers in the project evaluation of performance using QUADRATECH.

The Phase-Out scheme

In the SUCIRD Project's experience, the development partners believe they should prepare themselves for the phase-out scheme. They were aware of their intended good benefits derived from the project phase-out scheme, i.e., the ability to lead decisively in their own affairs, that it will "give us the opportunity to carry on the project activities" until the people's organization may hopefully be able to attain its development goals through its local leadership.

The RCAC was formed towards its project phase-out period by the leadership of the established people's organizations in the client communities. In some communities served, the RCAC is sometimes called local community management council/committee (LCMC). The RCAC serves as the governing board and policy-making body for the different community organizations in the clientele areas beyond the project's phase-out scheme.

As the governing board of people's organizations the RCAC has been tasked to "screen and approve all project proposals from the community organizations" established under the auspices of the SUCIRD project. It shall "oversee and monitor all the on-going livelihood projects of the concerned people's organizations", among others.

The RCAC or LCMC is composed of key leaders from each people's organization namely: 1) the president; 2) the secretary; 3) a member voted at large by the organization; 4) a professional member-cooperator of the organization but chosen at large, and 5) barangay captain who is full-fledge member of the organization. Thus, the council would be initially composed of 5 members.

As the RCAC started to carry on its own project management operations, the field extension workers assigned by Silliman University to the client communities were gradually pulled out therefrom.

To sustain its administrative operation, each concerned people's organization is mandated by the RCAC constitution to share two (2) percent of its net income of their livelihood projects. The percentage to be shared would be deducted before the patronage dividends and patronage refunds are distributed to the members. This is done every after project's inventory. With this practice one can easily deduce that the member-coordinators may have realized that the "interest of their organization must prevail over and above self-interest." Capital formation may be responsible for the sustainability of people's organizations.

Commitment and responsibility. The proper attitude has been developed by the organization's leadership in collecting loan repayments from the individual borrower-cooperators as well as from the sectoral group's projects to be endorsed to the Silliman University Extension Program. A policy was agreed upon by the project cooperators that 70% of the net profit (after deducting commissions for the volunteer staff) of their livelihood projects be endorsed to Silliman University as loan repayments every inventory. To date, the university has received deposits for loan repayments which would accrue to no less than two million Philippine pesos. This simply shows that the cooperators have developed a sense of responsibilities to their commitment and obligations.

Rapport establishment. When the concrete bridge in barangay Cabangahan, town of Siaton was under construction, all vehicles had to be detoured through a private land wherein the owner was exacting a toll fee per travel. The Board of Directors of the " Ang Kaugmaran sa Cabangahan" visited the land owner to appeal that all Silliman vehicles plying the area be exempted because "they are monitoring our project activities besides the fact they have assisted us developing our community". The private land owner immediately agreed and requested the Board Chairman to provide him the serial numbers of the Silliman vehicles for exemption purposes from the toll fee. The people in the clientele areas have developed a sense of gratitude for the SUCIRD Project's contribution to their community.

Capital formation scheme. In order to sustain the different SUCIRD projects, the people's organizations instituted a capital build-up (CBU) fund. This scheme is solely intended for productive purposes like income generating/livelihood projects both for individual embers and for the group as well. It is a non-withrawable CBU from any member. It is an automatic 10% contribution from the individual members and/or organization's income to the association. The CBU has been designed to provide a sustainable financial support to the association. This simply means that the individual members of the association are already preparing themselves for the future.

For instance, a Consumer's Store was able to purchase in cash a 6 cu. ft. tall GE refrigerator out of the 10% of the CBU of their organization. The Maloh (Siaton) Consumer's group has set aside a certain amount from their organization's capital build-up fund to buy a piece of land (about 10mx10m or 100 square meters), were to build their permanent consumer's store. This means that the member-cooperators are concerned with the stability of their consumer's cooperative project. This further shows that the all-out moral support the member-cooperators are giving to their community project is worthy of commendation.

Environmental conservation. The chairman of a fishing group narrated that before the SUCIRD project was implemented in the area, some "fishermen attempted to engage in dynamite fishing activities, but we are protecting the marine life as law abiding citizens". This favorable attitude may have been developed by the cooperators from the seminars on Ecology conducted by the staff of the Silliman University Marine Laboratory. For instance, "the use of fish traps will destroy the corals if the lower portion of the net touches the bottom part". This simply means that when the nets are pulled up, the corals are carried up hence the destruction occurs. He further explained therefore that "fishermen should only use floating nets to conserve the coral reefs".

Another example is that the farmers involved in the communal farming project planted napier grasses as hedge rows to divide their plots, to serve as contour bunds and prevent soil erosion. The grass has been utilized as feeds for their goats, cattle and carabao or buffalo.

<u>Periodic auditing procedure</u>. The conduct of the auditor in periodically doing cash count of the treasurer's money was worthy of commendation. This practice avoided misuse of funds or prevent possible malversation of funds in the hands of the treasurer. This behavior of doing cash counting has been developed after their consumer's store experienced alleged malversation of funds during the first two years of operation.

<u>Sense of duties and responsibilities</u>. The sense of responsibility and dedication to duties have been developed among the member-cooperators by attending regular meetings of their organizations to discuss issues and concerns affecting them to draft organization's policies and guidelines; to institute disciplinary measures for erring officers and members, and to plan projects of the organizations.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Insightful Experience and Extension Development Implications

In summary, certain views in development are drawn from the SUCIRD projects experience in terms of project scope, institutional and development concepts, as follows:

A. Project Scope

1. Adherence to the principle of openness and volunterism as well as the bottom-up planning principle in rural development work may give assurance to development planners of its sustainability.

2. The need to carefully look into the social analysis of the situations prior to setting of project objectives jointly done by the project management staff and the development partner communities is essential in rural development work. Capital formation through capital build-up scheme be institutionalized by the RCAC or LCMC to ensure sustaining financial capability of people's organizations.

3. Mutual trust and understanding among the officers and members of the people's organization, is a vital concern towards an effective and efficient accomplishment of goals.

4. Values education must be the primary concerns of the promoting institutions of higher learning to enhance social and cultural change.

5. Self-help economic projects must be based on feasibility studies to ensure project management efficiently.

6. Formulation of project objective must follow SMART (Specific, Measurable, Attainable, Realistic and Timebound) or TOMAS (Timebound, Observable, Measurable, Attainable and Specific).

7. Establishment of networking and linkages with government and non-government organizations promotes inter-organizational collaboration, cooperation and coordination.

B. On Development Concepts

1. There is no steadfast rule and methodology in doing extension development work. Extension workers do shifting gears in touching lives. Extension Strategies and approaches must respond to the project objectives based on situational analysis.

2. Rural development management as a total development approach must therefore be comprehensive, collaborative, integrative and sustainable in nature.

3. Extension development initiatives must give primary importance to social education and technical training at the project inception.

4. That enhancing factors to rural development such as social, economic, cultural, political, psychological and spiritual facets of life must comprehensively be integrated in project development planning.

5. Social education continues to be significant approach in people's mobilization program.

6. Production of social education and technical training modules should be based on project's experiential learning.

7. Adult education is a continuing process believing therefore on the statement, "old dogs learn new tricks".

8. Fast-tracking of organizing rural people runs counter to the principle of sustainable development because the people's organization would just die a natural death as fast as it was started.

C. As a Promoting Institution

1. The social institution must adhere to the total quality management principles as a change agency system or change agent in the extension development process.

2. The development institution must have FAITH in its ministry and in its capacity to touch lives out there in love and service.

3. The institution of learning must delve on pragmatism in promoting development initiatives based on the vision and mission thereof.

4. Service-learning approach as a pedagogy of teaching must take into consideration its philosophy and methodologies in the curricular preparation and syllabus making.

5. In setting up development program priorities, special attention be given to an ecologically-sound development program to ensure project sustainability.

6. Resource allocation to protect cooperators must be based on the people's felt needs to minimize if not prevent occurrence of mismanagement of project inputs.

7. Extension workers hired for development initiative must have the right attitude and the passion to live and work with the people served.

8. Development workers of institution of learning must possess common sense, which is "the knack of seeing things as they are and doing things they ought to be done".

Conclusion

In terms of the significance of the SUCIRD program in rural development in the public consciousness, institution of higher learning therefore may continue to examine its social responsibilities to the larger communities. Its development efforts should be able to uplift the quality of life of the rural people who have been confronted with both economic political crises. Educational institution could readily play a pivotal role in community development since the "outside world" serves as the University of Life".

Sustainability of development project operation may be made possible instilling organizational discipline, developing and strengthening the organizational capital formation and its continuing social education and technical training that serve as the backbone in making the extension development work a SUCCESS!

The rural development experience be internalized therefore by the extension development workers as well as by the leadership of the people's organizations. The RCAC may be institutionalized as the coordinative body to carry on the community-based rural development initiatives in the larger communities served.

The extension development workers are enjoined to observe and practice the community organizing process with passion to sustain their ministry of sharing and caring for others. Thus, enable them to enhance teamwork and cooperation and develop a, sense of community among the development partners. The "Bayanihan" type of working together encourages people to share their time, resources and efforts in various social, sports, cultural and political activities, as well as in their socio-economic projects.

The positive attitude to develop their skills to work towards environmentally-sound economic enterprises in the upland such as contour farming and social forestry activities; in lowland such as organic farming and bio-intensive gardening technology, and in coastal resource development effort to conserve marine resources, among others. Thus encouraging development implementers to place conservation of natural resource in the hands of the people.

IMPLICATIONS AND RECOMMENDATIONS

I. On Higher Education Institutions

Some ways and specific area(s) that the government, through its instrumentalities, particularly Commission on Higher Education (CHED), can assist academic institutions to further develop and attain its full potentials in serving the larger communities:

1. The CHED should establish different regional centers of Excellence in Extension in order to assist higher Education Institutions in upgrading or the knowledge and skills of extension personnel and to facilitate development seminar-workshops to capacitate them in planning, implementing, monitoring and evaluating community extension project. Because of the broad spectrum of the community extension initiatives of many institutions of higher learning in the Philippines, CHED should establish an Extension Development Institute to conduct series of social education and technical administrators among major administrators by regions in the Philippines.

2. Learning the status of the institutions extension (E) initiatives, both successes and failures will open the door of opportunity for the planners and implementers to re-think, re-assess, re-orient or modify and improve its development approaches and strategies to suit the needs of the rural development partners. However, the insights gained from these development learning ventures and experiences may contribute to the body of knowledge in rural development management, extension education, extension administration, community development, sociology, and social work, among others.

II. Operationalizing an Extension Development Program

Based on the SUCIRD experience in the field, certain guidelines are formulated to operationalize learning institutions rural development initiatives, as follows:

Project Objectives. Development program objectives must be reflective of the institution's vision and mission. Project objectives are formulated based on the physical, social, cultural, economic, political and psychological conditions existing in the clientele (partner) communities. This means analysis of the situation must be done first in order to guide project planners and implementors in their extension development work.

Strategies and approaches. These are formulated based on the project objectives set by the development planners . Any deviation from the objectives must be redirected after the project activities have been assessed on a yearly basis. The plan of activities to enable project implementors to carry out their objectives must suit therewith observing closely the SMART principles, i.e., objectives must be specific (S), measurable (M), attainable (A), realistic (R) and timebound (T).

Social education. The social education component of extension development project must be given primary consideration in the community organizing process. Life values education with Biblico-Theological Perspective must be given to the development partner communities first as a pre-requisite to organizing the rural folks. Training in rural communities should be conducted through structured self-learning experience to allow individual participants to draw their own insights therefrom.

Project periodic assessment. Projects are evaluated continuously through the yearly participatory community assessment to be conducted by the local leaders.The field extension workers will only serve as facilitators in this activity. A monitoring scheme will be formulated by the local leaders on the basis of their observations from the manner the "live-in" extension workers performed their tasks. In this scheme, the local leaders come together to evaluate or assess the organizational performance of the immediate past year's operation as planned. The assessment will also serve as basis for replanning for the succeeding years activities.

Provision for sustainable development. Towards the end of the project operation, the local leaders should be guided in establishing their own community council to monitor, oversee, and manage their on-going socio-economic support projects. In the case of the Silliman experience, the Rural Community Action Council (RCAC) is formed by the local community leaders. This would include the formation of the organization's revolving fund scheme, the capital build-up (CBU), to be generated from the 10% allotment per livelihood project by the people's organizations. The Rural Community Action Council acts as the local coordinating and policy-making board of the people. In the institutionalizing process, the RCAC shall be responsible of carrying on the rural organization's projects/activities. This forms part of the phase-out scheme of the community organizing approach.

Inter-agency linkages. The first step in linkage establishment is to call on local leaders. The proponent agency representatives paid a courtesy call on the Provincial Governor of the Province, then to the Municipal Mayor where the development initiative will be implemented, then to the Barangay Captain (Village head) of the project partner community. Their moral support, if properly tapped, may enhance or facilitate a speedy rapport building by the extension workers with the rural folks in the clientele communities. Other GOs and NGOs were also tapped as their expertise and experience may be useful to the project's success.

Intra-organizations coordination. The different academic units of the institution of higher learning coordinate their community extension work. The will to bring the expertise and facilities to the communities served through the Institute of Service-Learning. For instance, the College of Business Administration was tapped to conduct feasibility studies of economic projects identified by the rural people, which included the training on simplified bookkeeping and auditing. The Medical School, College of Nursing, Institute of Rehabilitative Science (Physical Therapy) and the Institute of Clinical Laboratory Science (Medical Technology) department on the health component. The Department of Nutrition and Dietetics for the nutrition and dietary aspect. The College of Agriculture handled the crops/livestock production. The Social Work Department facilitated the community organizing empowerment. The College of Education coordinated the social education and technical training component. The Psychology Department looked into the behavioral. The Divinity School and the University Spiritual Life Council on strengthening FAITH formation, among others. In the Service-Learning approach, the students would be translating the theories and principles learned in the classroom to real life situations. They would be learning from the people at the same time serving them. In so doing, the people will also learn from them in a synergistic relationship. The students are properly guided by the faculty who will give them merits on their field experience.

III. On development approaches

1. First and foremost in the linkage establishment and networking is the courtesy call on local leaders, for they can either make or unmake any development effort.

2. Identifying key community informants, key stakeholders and to know their roles and involvement in community affairs may be done effectively hrough community consultation. The analysis of the situation in the grassroots level will enable development workers to know first-hand information on some issues and concerns affecting peple's lives and their available resources. This is following the development principle, "start where the people are and build from what they have."

3. Coordination meetings with government agencies and non-government organizations by the project staff would aid them to identify partnership accountabilities to ensure synergy in efforts toward achieving the development goals. Participation analysis takes a tedious process in order to determine the roles and responsibilities of people, their tasks and functions as bases for rural leadership strengthening and capability building.

4. Based on the findings of the social assessment gathered from the different stakeholders, a series of consultative workshops shall be scheduled by the development extensionists to enable them to identify training needs for possible development interventions.

IV. On development/ extension workers.

They should be selected on the basis of their willingness to work with people. Those who think that people is their business or their business is people! They must possess the facilitative skills needed to handle group leadership/group management trainings and community organizing techniques.

The Extension Workers must also possess the four (4) C's, i.e., two C's for the brains, namely: Competence and Creativity and the other two C's for the heart, such as character and commitment. With these traits in mind, educational institutions' rural development projects may be assured of successful implementation.

Literature Cited

BOOKS:

CARINO, LEDIVINA V. and EMMA B. VINEZA, undated ed. The Search for an Approach, the Indang Experience, Development Academy of the Philippines

CUYNO, R. V. and M. F. LUMANTA, 1979. Internalizing Rural Development Experience, CPDS-MARD, UPLB.

DAVIS, KEITH and JOHN W. NEWSTRON, (1989). Human Behavior at Work: Organizational Behavior, 8th Ed., Mc Graw Hill Int'l book Company, USA pp.28-29.

ELMAN, NICHOLAS R. 1980. Attitudes of Cooperators Toward a Community Development Program In a Philippine Rural Village. Unpublished MS Thesis, UPLB.

MASLOW,A.H. 1954. Motivation and Personality, Harper Bros., New York,h5.

PAL, AGATON P. and Robert A. Polson (1973). Rural People's Responses to Change, Dumaguete Trade Area, Philippines, New Day Publishers, Quezon City, Philippines, pp. 264-265.

VALERA, JAIME B., VICENTE A. MARTINEZ, PLOPINO F. RAMINO, Edn (1987). An Introduction to Extension Delivery Systems, Island Publishing House, Inc., Manila.

WEBSTER'S New International Dictionary. 1959. Springfield, Mass: G. and C. Merriam C., Second Edition, p. 1916.

PUBLISHED ARTICLE:
ELMAN, NICHOL R. and CERES PIOQUINTO (1993). The Quadrangulation Appraisal Technique as Research Strategy for the Negros Oriental Ancestral domain Research Project, Silliman Journal, Vol. 38, Nos. 3&4, 1997

UNPUBLISHED THESIS:

DEPOSITARIO, WILLIE C. (1973). Role Performance of Barrio Council Members in Community Development Infrastructure Projects in the Province of Laguna, Ph.D. thesis, UPLB.

ELMAN, NICHOL R. (1993). Rural People's Response to the Integrated rural development project of Philippine institution of Higher Learning. Unpublished Ph.D. Thesis, UPLB.

_____ **(1980)**. Attitudes of Cooperators Toward a Community Development Program In a Philippine Rural Village. Unpublished MS Thesis, UPLB.

YUZON, LOURDINO A., (1974). An Analysis of the Social Mission of the United Church of Christ in the Philippines, A dissertation: Boston University.

UNPUBLISHED CONFERENCE PAPERS:
DOROMAL, QUINTIN S. (1978). The University Extension Program of Silliman University. A paper Read at the 5th Triennial Conference of the International Association of University Presidents (IAUP), June 25-27, 1978, Tehran, Iran, (Former President of Silliman University, 1973-1983).

ELMAN, NICHOL (2009). Rural Development Management Initiatives: The Silliman Experience. 1st Biennial Convention, Philippine Association of Extension Program implementors, Maritime Academy of Asia & the Pacific (MAAP), Mariveles, Bataan, May 2009.

_____ **(2008).** "Transformational Integrative and Comprehensive Approach to Organizing (TICAO): An Area Development Framework. National Conference, Philippine Association of Extension Program Implementors Inc. (PAEPI), Technological University of the Philippines, October 29 & 30 to November 1, 2008
_____ **(1986).** Experiential Learning in Rural Mobilization. " A paper read at the conference on the Role of Communication in Rural Development Forum, Dumaguete City, February 14, 1986, sponsored by the Kanlaon Foundation with the cooperation of the Asian Institute of journalism and the center for Research and Communication.

_____ **(1998).**"State Community Extension Services in Some Philippine Institution of Higher Learning", National Centennial Congress on Higher education, May 28-29, 1998, Manila, Midtown Hotel, Ermita.

The Success and Failure of E-Government in Developing Countries: Lessons and Recommendations for Thailand

Pananda Chansukree[1]

Introduction

In the modern world, information and communication technologies (ICTs) have been playing an increasingly vital role in our daily lives. In the realm of government, ICT applications have dramatically changed government services as well as people's expectations of the quality and efficiency of government information sharing and public service delivery (Pascual 2003; Riley and Sheridan 2006). E-government, which is the use of ICTs in governments and public administration, has been widely utilized as a strategic tool to modernize structures, processes and the overall culture of public administration (Chen, Chen, Huang, and Ching 2006; Stahl 2005). It represents 'the introduction of a great wave of technological innovation as well as government reinvention' (Ndou 2004, p. 1). E-government policy is currently undertaken throughout the world, bringing a new stage to public sector reform (Kudo 2008; Meijer and Zouridis 2006). As pointed out by Zouridis and Thaens (2005), 'the transformation of government into e-government turns out to be a global phenomenon' (p. 22). Many governments around the world have formulated their dreams, visions, and plans for introducing at least some forms of e-government. They have put critical information online, automated once cumbersome processes, and interacted electronically with their citizens (Riley and Sheridan 2006).

Due to the widespread adoption of e-government strategies, it has attracted more and more research interest and focus from theorists and researchers. This has led to a large number of studies and research on e-government strategies and implementation. However, most currently published e-government strategies are based on successful experiences from developed countries. Realizing the pressure and demand from the public to provide e-government services online, many developing countries have no choice but to hastily follow e-government development strategies proposed and implemented by developed countries (Chen et al. 2006). This is a main reason why there has been a high rate of e-government failure in developing countries. In fact, e-government strategies and experiences from developed countries could not be directly applied to developing countries, because of the substantial differences between developed and developing countries (Chen et al. 2006; Heeks 2002). Different human, organizational and technological factors, issues and problems which pertain in developing countries require focused studies and appropriate approaches (Ndou 2004).

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Therefore, this paper intends to do some initial work to bridge this gap. The purposes of this paper are to identify key factors for the success and failure of e-government in selected developing countries, and to draw implications for e-government implementation in Thailand. The findings and insights in this paper will provide a better understanding of e-government in developing countries as well as offer lessons and recommendations for developing and refining e-government projects in Thailand.

Similar to other developing countries, Thailand has implemented e-government to solve the problem of government failures such as dwindling capabilities, overlapping, lack of integration, inefficiency, structural problems, inappropriate roles and size of the public sector, widespread corrupt practices, and so forth. The implementation of e-government has provided citizens with increasing access channels to government information and services, resulting in greater accountability and transparency. It has also enabled public agencies to deliver services to citizens more efficiently and effectively by simplifying government processes altogether (OPDC 2006). Nevertheless, Thailand has confronted many difficulties related to e-government implementation such as lack of public officials' readiness, absence of common ICT standards and central infrastructure, and the digital divide (Lorsuwannarat 2006). Therefore, the lessons drawn from e-government implementation in other developing countries, both in what works and what does not, will provide meaningful guidance for Thailand in solving existing problems, anticipating potential problems, and creating more robust and effective e-government projects.

The structure of this paper is as follows: the paper begins with reviewing the literature on e-government, including the definitions of e-government, the benefits of e-government, the success and failure of e-government, and the current situation of e-government in developing countries. In Section 2, the National E-Government Infrastructure (NeI) framework (Chen et al. 2006), which is employed to analyze the case studies in this paper, will be described. Section 3 contains the methodology that underpins the research process. Section 4 presents the analysis of the case studies, consisting of two success cases and two failure cases. Each case study is presented in a common format: a brief background; the implementation of e-government; and the analysis of the four factors influencing e-government implementation. Section 5 summarizes lessons learned for Thailand, highlighting the factors critical to the success and failure of e-government, and provides some suggestions for reducing the risk of e-government failure along with each factor. Section 6 identifies the limitations that have to be considered for future research. Finally, the paper offers some concluding remarks.

Research Objectives

The objectives of this paper are as follows:
1. To understand the success and failure of e-government;
2. To identify the factors critical to the success and failure of e-government in developing countries;
3. To draw lessons and provide recommendations for e-government implementation in Thailand.

Literature Review

Defining E-Government

It is almost impossible to create a brief, workable definition of e-government, not only because it has very little theoretical foundation, but also because it is in a constant state of evolution (Bekkers and Homburg 2005; Chadwick 2006). The meaning of e-government is also based on pragmatic experiences and visions (Bekkers and Homburg 2005; Chadwick 2006; Ndou 2004). Moreover, there are different national interpretations of the term (Chadwick 2006). Thus, e-government lacks a consistent, widely accepted definition (Schelin 2007). It is the term with a variety of definitions.

Some definitions are rather narrow, focusing on using ICT, particularly the Internet (Ndou 2004; Snellen 2005). Some scholars simply define e-government as 'digital governmental information or a way of engaging in digital transactions with customers'; for others, e-government simply consists of 'the creation of a web site where information about political and governmental issues is presented' (Ndou 2004, p. 3). These narrow ways of defining e-government restrict the range of opportunities it offers. As pointed out by Ndou (2004), one of the main reasons for e-government failure is related to the narrow definition and poor understanding of the concept, processes, and functions of e-government.

Others view e-government more broadly as efforts to transform government (Jansen 2005; Snellen 2005). For instance, Riley and Sheridan (2006) define it as 'government's use of ICTs to work more effectively, share information and deliver better services to the public' (p. 189). In the OECD definition of e-government, it is defined as 'the use of information and communication technologies, and particularly the Internet, as a tool to achieve better government' (OECD 2003, as cited in Bekkers and Homburg 2005, p. 7). According to Bekkers and Homburg (2005), e-government is 'the use of modern information and communication technologies, especially Internet and web technology, by a public organization to support or redefine the existing and/or future (information, communication and transaction) relations with 'stakeholders' in the internal and external environment in order to create added value' (p. 6). These broad definitions are more practical than narrow definitions since e-government is a multidimensional and complex concept, requiring a broad definition and understanding, in order to be able to design and implement successful strategies (Ndou 2004).

Although e-government is defined in various ways, the common theme behind those definitions is that 'e-government involves the automation or computerization of existing paper-based procedures that will prompt new styles of leadership, new ways of debating and deciding strategies, new ways of transacting business, new ways of listening to citizens and communities, and new ways of organizing and delivering information' (Pascual 2003, p. 5). Its ultimate goals are to enhance access to and delivery of public services to benefit citizens, and to help strengthen government's drive towards effective governance and increased transparency (Pascual 2003).

Benefits of E-Government

The benefits generated by e-government can generally be categorized into three main areas: the efficiency and effectiveness of public administration, the quality of public service delivery, and the openness and transparency of political processes (Haldenwang 2004; Ndou 2004).

- *Efficiency and Effectiveness of Public Administration*

E-government can improve the efficiency and effectiveness of internal functions and processes of public agencies by interrelating different departments and agencies (Haldenwang 2004; Ndou 2004). Therefore, 'information can flow much faster and more easily among different governmental departments, reducing processing time, paperwork bottlenecks, and eliminating long, bureaucratic and inefficient approval procedures' (Ndou 2004, p. 4). The sharing of information can also increase internal efficiency by reducing time for using, storing and collecting data, decreasing labor costs and information handling costs, as well as enhancing the speed and accuracy of task processing (Bhatnagar 2002; Chadwick 2006; Ndou 2004). More importantly, 'e-government will help breaking down agency and jurisdictional barriers to allow more integrated whole-of-government services' (Chen et al. 2006, p. 24). This is because it facilitates both vertical cooperation and horizontal cooperation by providing the ability to share information across individual bureaus, departments, ministries and levels of government in an electronic form, contributing to the flattening of hierarchical command structures (Bhatnagar 2002).

- *Quality of Public Service Delivery*

E-government is often employed primarily to enhance the quality of public service delivery in terms of time, content, and accessibility by improving the provision of information and reorganizing the transaction of public services (Chen et al. 2006; Haldenwang 2004; Ndou 2004; Pascual 2003). As pointed out by Ndou (2004), e-government provides citizens and businesses with access to a greater range of information collected and generated by government. It also expands the reach and accessibility of public services and allows citizens to experience a faster and more transparent form of access to government services (Chadwick 2006; Ndou 2004). Moreover, 'vertical and horizontal integration of services can be realized, enabling the integration of information and services from various government agencies to help citizens and other stakeholders get seamless services' (Ndou 2004, p. 4).

- *Openness and Transparency of Political Processes*

E-government can also lead to a fundamental change in the relationship between governments and citizens (Dada 2006; Haldenwang 2004; Ndou 2004). This is because the intensification of information and communication flows that characterizes e-government can strengthen the transparency and openness of political processes (Haldenwang 2004). According to Ndou (2004), e-government helps increase the transparency of decision-making processes. In many cases, it provides citizens with opportunities to directly participate in decision making by allowing them to provide their ideas and suggestions in forums and on-

line communities. Furthermore, e-government makes it easier for citizens to participate in and contribute to governmental issues (Chen et al. 2006).

Understanding E-Government Success and Failure

The criteria to identify an e-government project as a success or a failure in general, and those in developing countries in particular, have been proposed by several theorists (Krishna and Walsham 2005). Although there is no consensus on how to measure e-government success and failure, the criteria which are probably most popular among contemporary scholars and researchers are those proposed by Heeks (2002) who has done a substantial amount of research in the subject area.

According to Heeks (2002), e-government initiatives can be divided into three categories. First, there is the *total failure* of an initiative which is never implemented or is implemented but soon abandoned. The second possible outcome is the *partial failure* of an initiative, in which major goals are unattained or in which there are significant undesirable outcomes. Finally, there may be the *success* of an initiative, in which most stakeholder groups attain their major goals and do not experience significant undesirable outcomes.

Heeks (2003) further states that e-government success and failure depends on 'the size of gap that exists between current realities and design of the e-government project' (p. 3). The larger the design-reality gap, the greater the risk of e-government failure. In the same way, the smaller the gap, the greater the chance of success. Nevertheless, given the focus of this paper, the design-reality gap archetypes of e-government failure is beyond the author's current scope.

Success and Failure of E-Government in Developing Countries

An increasing number of e-government projects have been implemented in developing countries. This is because 'e-government – the use of information and communication technologies (ICTs) to improve the activities of public sector organizations – brings with it the promise of greater efficiency and effectiveness of public sector operations' (Heeks 2003, p. 2). More importantly, it has the potential to enable developing countries to reach development objectives faster and at a lower cost than conventional approaches (Basu 2004).

However, at present, most e-government projects implemented in the developing world fail either totally or partially. In a recent survey regarding the success and failure rates of e-government in developing countries, Heeks (2003) finds that the majority of e-government projects in developing countries fail, with 35 percent being classified as total failures and 50 percent as partial failures. Only 15 percent are considered as successes. This is a disturbing fact, particularly as developing countries have the limited availability of resources such as capital and skilled labor, and cannot afford to wastefully spend large amounts of money typical of such projects (Dada 2006; Heeks 2002).

Moreover, e-government failures could deepen the digital divide in developing countries and further marginalize them with the networking revolution (Heeks 2002; Ndou 2004). Developing countries which fail to embrace and use e-government as a tool for entering the global network and for addressing development needs 'will suffer pivotal disadvantages in form of information poverty that could further widen the gap in economic status and competitiveness' (Ndou 2004, p. 7). Since the failure of e-government in developing countries is a real and practical problem, it is vitally important to examine the reasons for success and failure of e-government initiatives in those countries (Stanforth 2007).

Conceptual Framework

This paper adopts the National E-Government Infrastructure (NeI) framework proposed by Chen et al. (2006) as the research framework to identify and analyze the factors critical to the success and failure of e-government in selected developing countries. According to this framework, there are four factors which influence e-government strategies and implementation as follows:

NeI Factor 1: Network Access

Network access is measured by the availability, cost, and quality of ICT networks, services, and equipment. More specifically, it includes the following key elements:

- *Infrastructure Development*

Infrastructure development is a necessity before countries can consider any e-government projects. Citizens must have access to services before any of the cost saving benefits will apply.

- *Resources and IT Support*

Outsourcing can be an option for countries to implement e-government projects. Developing countries may need support from the private sector in terms of financial and human resources to successfully develop applications due to their lack of resources.

- *Utilization*

The citizen utilization of the Internet is based on the access to the Internet and the Web site. In addition to providing a better infrastructure, technical support must provide 24/7 access so that more citizens can utilize the Internet.

NeI Factor 2: Network Learning

Network learning concerns two key issues: (1) Does an educational system integrate ICTs into its processes to improve learning? and (2) Are there technical training programs that can train and prepare an ICT workforce? Technical staffing and training is a major issue in e-government implementation.

NeI Factor 3: Network Economy

Network economy concerns how businesses and governments use ICTs to interact with the public and with each other. Key issues involved include collaboration between government departments and agencies, public-private sector partnership, and e-community creation. In order to implement e-government projects in an efficient way, government departments and agencies must collaborate with each other, with private organizations, and with related communities.

NeI Factor 4: Network Policy

Network policy concerns the extent that the policy environment promotes or hinders the growth of ICT adoption and use. Related key issues include laws and legislation, as well as strategies (visions and missions). Before implementing e-government projects, a complete set of laws relating to the development of e-government should be in place. Furthermore, the government needs to have the overarching vision which is translated into effective strategies.

Research Methodology

Due to time constraints, this paper applies a qualitative research methodology by using secondary data, including published reports and papers, and related documents on e-government projects in developing countries. Content analysis is used for data analysis.

Case Study

Success Case 1: CARD and E-Seva Projects in the State of Andhra Pradesh in India

- *Background*

Andhra Pradesh is a large state in southern India. Until the mid-1990s, it was the least developed state in South India in economic terms, and had no significant IT usage in the public sector. In 1998, Chandrababu Naidu won the election and became the state's Chief Minister. Soon after he took over, Naidu who was known as a reform-oriented leader started on the path of reaching out to people through performance and better governance. After the implementation of new initiatives with a major focus on e-government projects, Andhra Pradesh has made significant progress on economic, infrastructure, and social fronts. In terms of IT usage, it has become the most advanced in India (Krishna and Walsham 2005). As pointed out by Sudan (2002), 'Andhra Pradesh has emerged as one of the leading states in India in e-government applications, with the State Government implementing a comprehensive plan to utilize IT for better services to citizens' (p. 1). The most successful e-government projects in the state of Andhra Pradesh are the CARD and e-Seva projects (Basu 2004; Krishna and Walsham 2005).

- ## *The CARD and E-Seva Projects*

CARD stands for the Computer-aided Administration of Registration Department project. Prior to the implementation of the CARD project, all sale, mortgage, and gift transactions for immovable property had to be registered through the manual system at the subregistrar's offices. Since large amounts of money were involved in transactions, the subregistrar's offices had been associated with corruption and unnecessary delays. Although the minimum time for completing the registration of a transfer document was supposed to be two weeks, it took five to six weeks in practice. In 1998, the registration office in Hyderabad – the capital city of Andhra Pradesh – was taken up for computerization as one of the earliest e-government projects. Since then, the age-old manual system of registering legal deeds has been replaced by a simple, transparent, and convenient system. The time required for registration is mostly less than half a day. After success in Hyderabad, the CARD project was extended to cover the entire state. By March 2003, the project was implemented in all the 387 subregistrar's offices across the state, marking the complete implementation of the project (Krishna and Walsham 2005).

As for the e-Seva peoject, it is a substantially more complex e-government project which is successfully implemented in a developing country context. The project's objective is 'to simplify and facilitate citizens' interaction with the multiple agencies involved in infrastructure and other basic services' (Krishna and Walsham 2005, p. 132). Before the launch of the e-Seva project, a citizen had to deal with multiple agencies at different offices in different locations for matters concerning payment of charges for utilities like electricity and water, property tax, birth and death registration, passport applications, vehicle permits, driving licenses, reservations of train tickets, and so on. Since processing was manual and slow, citizens normally had to wait in long queues. Moreover, the pain of having to deal with corrupt officers was multiplied because a citizen had to interact with many separate offices and staff. The e-Seva project was intended to solve these problems by providing comprehensive service at a large number of locations in Hyderabad (Krishna and Walsham 2005; Kshetri 2002). The first e-Seva center, established in 1999, was funded fully through state government resources. After successful operation for a year, the project was extended throughout the Hyderabad city. This has enabled a citizen to approach any center within the city for any of the needed transactions, instead of dealing with multiple agencies. By mid 2003, there were 36 e-Seva centers and 81 ATM payment points with a total of around 400 counters in operation. The project was planned to be extended to 117 municipalities with a total of 214 centers, making the service available to 85 percent of the population of the state (Krishna and Walsham 2005).

- ## *Analysis*
  - ### o **NeI Factor 1: Network Access**

Infrastructure Development: Before implementing the CARD and e-Seva projects, infrastructure development was considered as a major element of the e-government strategy. This was because the state government realized that without good ICT infrastructure, public services could not be electronically delivered to citizens (Sudan 2002). According to Krishna and Walsham (2005), back-end infrastructure development in Andhra Pradesh involved 'bandwidth, or more generally, network connectivity, using fiber optics, hybrid coaxial,

satellite, and wireless, with less expensive wireless technologies for expansion into rural areas' (p. 130). The effective back-end infrastructure has facilitated the networking of transactions (CARD) and different databases (e-Seva). In addition, the state government's emphasis on infrastructure development has enabled citizens to access public services more conveniently. As pointed out by Krishna and Walsham (2005), the CARD project was already extended throughout the state and the e-Seva project would be extended to cover the entire state in the next few years.

Resources and IT Support: The CARD project's total capital cost was approximately US$7 million (Krishna and Walsham 2005). The implementation of this project was fully funded by the state government's budget (UNDP 2007). This illustrates that e-government projects can be successfully implemented at a minimum cost and without financial support from the private sector. Moreover, the CARD project proves that e-government could be implemented by just training the existing staff, without recruiting new IT staff or seeking the private sector's support in terms of human resources. Nonetheless, this project has involved private Indian firms with the technical competence in handling IT infrastructure and systems development issues (Krishna and Walsham 2005). On the other hand, the e-Seva project has involved a great deal of support from the private sector due to its complexity. Although the first center was totally funded through state government resources, the establishment of other centers involved private companies through a bidding process. The hardware and software operational components were outsourced to separate private companies who were paid a small charge on transactions put through their systems. These have helped provide a reliable infrastructure without any further investment by the government. However, the state government did not require the private sector's support regarding IT personnel, since all e-Seva centers have been staffed by government employees who were trained to take over operations of the system (Krishna and Walsham 2005).

Utilization: Due to the state's low per capita income, only a tiny fraction of the population in Andhra Pradesh can afford personal computers and Internet services. Moreover, the illiteracy rate of 54 percent means that a majority of the population lacks basic skills required to use the Internet (Kshetri 2002; Sudan 2002). However, the state government has succeeded in overcoming these barriers by providing various public services through the subregistrar's offices and the e-Seva centers which are available throughout the state, covering both urban and rural areas. In those offices and centers, the illiterate can also be assisted by well-trained government employees in doing transactions and accessing public services (Krishna and Walsham 2005).

  o **NeI Factor 2: Network Learning**

Educational System: The state government has focused on education and research institutions to ensure a pool of highly skilled and qualified personnel for both the IT industry and e-government implementation. A new institution, the International Institute of Information Technology, devoted solely to IT education, was established in Hyderabad. This institute is unique in that it combines the best of university education with training by leading IT companies, such as IBM and Oracle. A Bachelor of Computer Applications Program was

also introduced for the first time and is now available in 414 colleges in the state. Besides, a Master of Science in Information Technology Program has been structured in association with Carnegie Mellon University in the U.S. for providing high-quality world class IT education using distance learning methods. This program has produced a pool of skilled IT workforce. Apart from IT education and using computers for education, a strong emphasis has been placed upon thinking, analytical, creative, and innovative skills that will become increasingly important in the future (Sudan 2002).

Technical Training: With respect to technical training programs, Andhra Pradesh has adopted a two-track approach. Firstly, awareness and training programs have been provided for Ministers, Secretaries, and Heads of Departments. Secondly, an attempt has been made to build up a team of public employees with IT knowledge and understanding. There have been various measures to build internal capabilities and skills through training, in order to ensure that IT becomes an intrinsic part of the organizational culture in the government. A major measure is to equip the Dr. Marri Chenna Reddy Human Resources Development Institute of Andhra Pradesh with computer training facilities to cater to on-going training programs provided for public employees. This two-track approach has laid a solid foundation for capacity building within the government for planning and implementing e-government projects (Sudan 2002).

- o **NeI Factor 3: Network Economy**

Collaboration: These two successful projects demonstrate that there has been good coordination between different government departments and agencies. To implement the CARD project, all transactions need to be at networked computer terminals. Creating a comprehensive database requires collaboration between governmental agencies involved in property sale registrations (Krishna and Walsham 2005; Sudan 2002). As for the e-Seva project, it requires much more coordination than the CARD project as it is one of the most complex e-government projects implemented in India. Its success has derived from good collaboration between various departments and agencies involved in infrastructure and other basic services. They need to cooperate with each other in creating networked databases and integrating several subsystems (Krishna and Walsham 2005).

Public-Private Partnership: A major goal of the IT strategy in Andhra Pradesh is to synergize with the private sector. In particular, this meant cooperation with the Indian IT industry (Krishna and Walsham 2005). The CARD project requires the private sector's cooperation in managing IT infrastructure and systems development issues. As for the e-Seva project, it clearly illustrates that in implementing complex e-government projects, the government needs to collaborate with the private sector to fund and support those projects. As pointed out by Krishna and Walsham (2005), 'e-Seva centers have been set up through government-private sector joint participation' (p. 132). The hardware and software infrastructure is maintained by private companies. For example, the services of GartnerGroup have been engaged for structuring the portal which integrates the delivery of citizen services on a one-stop mode. However, operation of the services is handled by public employees. The public-private partnership has led to the economic viability and long-term sustainability of both projects.

E-Community Creation: To create e-community, the Chief Minister has skillfully used all the available media to communicate the importance of IT for the future development of the state, and to explain his e-government agenda. This has generated the enthusiasm in the public at large (Krishna and Walsham 2005; Sudan 2002). In addition, the state government has realized that merely communicating the vision with the citizens cannot guarantee success. It is also important to ensure that citizens are truly empowered by the usefulness of technology. Therefore, the government has attempted to make citizens acknowledge that the CARD and e-Seva projects can provide them with greater convenience (Kshetri 2002; Sudan 2002).

- o **NeI Factor 4: Network Policy**

Laws and Legislation: Before the implementation of the CARD project, some legislation such as the Registration and Stamps Act, Urban Land Ceiling Act, Surplus Agriculture Land Act, Endowment Property Act, and the Property Act were revised to accommodate the new procedure (UNDP 2007). As for the e-Seva project which is much more complicated than the CARD project, it involves some changes in legislation related to 'authentication of users, security and protection of databases, auditing of transactions, receipting of payments and privacy of citizen data' (Sudan 2002, p. 6). These two projects clearly demonstrate that the state government has put a strong emphasis on laws and legislation, which is a major foundation for implementing e-government projects.

Strategies: Soon after being elected as the Chief Minister, Naidu announced a major thrust in information technology, with the explicit objective of radically improving ways of governance and development. The vision he had for following the successful e-government projects in Southeast Asian countries like Singapore has played a vital role in the success of the CARD and e-Seva projects (Krishna and Walsham 2005). Both projects were initiated by his overarching vision for the future. Based on his vision, the state government embarked upon a major exercise to initiate the Vision 2020, consisting of information technology and knowledge activities as major components (Sudan 2002). Then, external consultants such as McKinsey and KPMG were responsible for translating the vision of the state government into organizational and technical frameworks, and defining specific goals and targets (Krishna and Walsham 2005). The overarching vision and effective initiatives have contributed to the success of both e-government projects.

Success Case 2: E-Services Project in Malaysia

- • *Background*

As elsewhere, Malaysia has implemented e-government as a leading component of administrative reform and governance innovations (Siddiquee 2007). At present, Malaysia is one of the leaders in the implementation of e-government solutions. According to a survey on international e-government ranking list, Malaysia has improved tremendously since 2005. The country was ranked 157 out of 198 countries in 2005, but in 2007, the ranking leapfrogs to 25 (Wah 2007). The Malaysian government initiated the implementation of e-government by introducing the Multimedia Super Corridor (MSC) in 1996, in order to transform the

nation into a knowledge-based economy. The establishment of the MSC is seen as a milestone as it has accelerated ICT applications in the public sector to enhance its services for citizens. E-government is one of the seven MSC flagships (Ahmad and Othman 2007; Ambali and Hashim 2007; Shafie 2007; Siddiquee 2007). Its objectives are 'to bring dramatic improvements in the quality of government's interactions with its citizens by enhancing convenience, accessibility and efficiency of its services and also making government more responsive to the needs of its citizens' (Ambali and Hashim 2007, p. 441). Under the e-government flagship, seven main projects were identified as the core of the e-government applications. These projects include Electronic Services Delivery (E-services), Electronic Procurement (E-procurement), Electronic Labor Exchange (ELX), Generic Office Environment (GOE), Human Resource Management Information System (HRMIS), Project Monitoring System (PMS), and E-Syariah (Ahmad and Othman 2007; Karim 2003; Shafie 2007). According to Karim (2003), the first three projects have recorded significant success in the e-government program. However, this paper will only focus on the e-services project, which has resulted in significant improvements in service delivery (Karim 2003; Siddiquee 2007).

- *The E-Services Project*

This project is a pilot project that enables Malaysian citizens to conduct transactions through a one-stop service window and provides easier access to government agencies such as the Road Transport Department, the Ministry of Health, and utility companies (Ahmad and Othman 2007; Ambali and Hashim 2007; Karim 2003; Shafie 2007). The e-services scheme has effectively integrated various public services like the renewal of driving licenses, the registration of new vehicles, the payment of summons, the acquisition of health information, and the payment of utility bills (Ambali and Hashim 2007; Siddiquee 2007). As of April 2007, a total of 11 services are offered by e-services (Shafie 2007). Citizens are now allowed to access all these services electronically. They are provided with a variety of service delivery channels, such as the Internet, Interactive Voice Response (IVR), and kiosk machines, with 24-hour access that is available anywhere at their convenience. Thus, they are no longer limited to carrying out these transactions at agency branches and utility offices (Ahmad and Othman 2007; Ambali and Hashim 2007; Karim 2003; Shafie 2007). In addition, 'the use of ICT allows for multiple language capabilities for each access device and the services offered are tailored to be more user-friendly, multimedia and help-responsive in addressing the needs of such segments of population as the elderly, the ICT disadvantaged and physically disabled persons' (Karim 2003, p. 196).

- *Analysis*
  - **NeI Factor 1: Network Access**

Infrastructure Development: As a new entrant into the world of ICTs, Malaysia had given priority to the establishment of strong ICT infrastructure before venturing onto e-government development (Mohamed and Bakar 2004). For instance, to build an information superhighway, 'the MSC is linked to the world through a 10 Gb/s network that allows it to support its flagship applications' (Ramasamy, Chakrabarty, and Cheah 2004, p. 879). Thus, it can be said that ICT infrastructure in Malaysia is well-developed, particularly

in major cities. Although the infrastructure is still lacking in rural areas, the government has been attempting to develop it so that e-services can be accessed nationwide (Basu 2004; Himmelsbach 2002). The government's emphasis on infrastructure development has played an important role in enhancing the success of the e-services project.

Resources and IT Support: Since the Malaysian government has realized the potential benefits of e-services, it has provided the appropriate investments to make the e-services project work (Ahmad and Othman 2007; Hammim 2002). The project has been fully funded by the government (Ramasamy et al. 2004). In terms of IT staff, the government decided not to outsource the staffing issue to the private sector. Instead, government employees have been provided with training programs to improve their IT knowledge and understanding, so that they would be able to handle operation of online services efficiently.

Utilization: Since ICT penetration rate in Malaysia is still rather low, the government has aggressively encouraged wider ownership of personal computers through tax deductions and also provided ICT facilities in rural areas, such as the Internet village (Karim 2003). With respect to e-services, the government has provided better, wider, and more affordable access to the services by leveraging multiple channels (beside the Internet) such as interactive TV, IVR, and multimedia kiosks located in shopping malls (Ahmad and Othman 2007; Ambali and Hashim 2007; Karim 2003; Shafie 2007). These options have helped increase citizens' usage of e-services.

o **NeI Factor 2: Network Learning**

Educational System: In terms of IT literacy, Malaysia is considered advanced due to the government's proactive efforts in encouraging and promoting an IT-literate society through education (Karim 2003). The government has allocated a large amount of budgets for upgrading the Malaysian educational system and its facilities. Its efforts in the field of education to provide for the development of human resources include programs at all levels of education, ranging from primary level education to tertiary level education (Ramasamy et al. 2004). In addition, the government has collaborated with private firms to provide digital education nationwide for youth, students, and citizens at large (Ambali and Hashim 2007). In 2003, Malaysian Grid for Learning (MyGfL) was also endorsed by the current Prime Minister as 'the national e-Learning initiative to promote and support the lifelong learning agenda in Malaysia to accelerate the spill-over of e-government benefits and/or e-services to people, especially the poor, through the use of ICT' (Ambali and Hashim 2007, p. 442).

Technical Training: Due to the eagerness in creating a society of knowledge workforce, the Malaysian government has placed a strong emphasis on the development of technical expertise (Basu 2004; Mohamed and Bakar 2004). As pointed out by Ramasamy et al. (2004), the government has provided various funds for the training and retraining of both government employees and IT workers. Those training programs have helped develop the human resource pool for the MSC in general, and for the e-government project in particular.

o **NeI Factor 3: Network Economy**

Collaboration: In implementing the e-services project, different government agencies have worked closely together to introduce online services in an attempt to increase the ease and efficiency of public services to citizens. The collaboration has involved not only technical issues but also shared customers (Ahmad and Othman 2007; Shafie 2007). The project coordinators have played a key role in facilitating planning for seamless services, clarifying data sharing arrangements, and addressing accountability issues (Ahmad and Othman 2007). The government is confident that with the full implementation of the e-services project, 'more and more services could be provided online where agencies at federal, state and local authority will collaborate relating to services and present them as one public service portal' (Siddiquee 2007, p. 86).

Public-Private Partnership: The implementation of e-services in Malaysia has involved a great deal of cooperation between the government and the private sector (Ahmad and Othman 2007). As pointed out by Karim (2003), the e-services project, as well as other pilot projects under the e-government flagship, was set up through smart partnerships between local and international firms working together with the government in developing leading-edge solutions.

E-Community Creation: To ensure acceptance and usability of e-services, the government has continuously attempted to encourage and promote an ICT culture (Karim 2003). This has been carried out by promoting the effective use and awareness of ICTs to improve standards of living, learning, work and recreation, as well as people's access to online services (Ambali and Hashim 2007). The government has also endeavored to raise citizens' awareness of the benefits of e-services by means of various methods like brochure publications and demonstrations (Ahmad and Othman 2007; Shafie 2007).

o **NeI Factor 4: Network Policy**

Laws and Legislation: The Malaysian government has made necessary changes in legislation in parallel with the implementation of the e-services project (Karim 2003). Several policies and regulations have been introduced to support the implementation of e-services. Among the existing and future laws are Communications and Multimedia Act 1998, Digital Signature Act 1997, Computer Crimes Act 1997, Copyright Amendment Act 1997, Personal Data Protection 2004, Electronic Government Activities Act (proposed), and Electronic Transactions Act (proposed) (Ahmad and Othman 2007). These laws have helped increase Malaysian citizens' confidence and trust in using online services.

Strategies: What differentiates Malaysia from other countries is the brainchild of the former Prime Minister Mahathir Mohammed, who conceived the idea of MSC in 1995. His overarching vision had resulted in the strong commitment to e-government among the government leaders, causing the role of the government in developing e-government initiatives to be expansive (Hammim 2002; Ramasamy et al. 2004). In particular, the government leaders have strong drive for providing e-services (Basu 2004; Himmelsbach 2002). They have translated the Prime Minister's vision into an action plan by putting in place the appropriate strategies to establish a successful implementation of e-services nationwide (Mohamed and Bakar 2004).

Failure Case 1: E-Government Initiative in Jordan

- *Background*

The ICT initiatives in Jordan started with the REACH initiative, which was launched in 1999. REACH is an acronym for the actions to be taken in the following areas: Regulatory framework strengthening, Enabling environment (Infrastructure development), Advancement programs, Capital and finance, and Human resource development. It was the core ICT program initiated to transform the country into e-Jordan. The major goal of the REACH initiative is to support Jordan's emerging IT sector and maximize its ability to compete in local, regional, and global markets. To comply with REACH objectives, Jordan has undertaken major ICT programs, including the e-government initiative (CSDMS 2008; Elsheikh, Cullen, and Hobbs 2008).

- *The E-Government Initiative*

The Jordan e-government initiative is a national program initiated by King Abdullah II in September 2001. It has been utilized as the major tool to modernize Jordanian public administration, which is organized in a bureaucratic hierarchy (Elsheikh et al. 2008). The e-government project is mainly aimed at 'using new technologies to facilitate inter- and intra-agency communication and cooperation, as well as providing information and services to its citizens more efficiently' (Elsheikh et al. 2008, p. 88). The long-term vision for the project is 'to create a society where electronic government is a contributor to the electronic and social development of Jordan' (Al-Omari 2006). The e-government initiative relies on five building blocks: introduction of e-services, infrastructure development, education and training, legal change, and fostering establishment of management and organizational framework (Ciborra and Navarra 2005; Elsheikh et al. 2008). The government agency which plays a key role in administering the e-government program is the Ministry of Information and Communications Technologies (MoICT) (CSDMS 2008; Elsheikh et al. 2008). After seven years of the implementation, the e-government initiative in Jordan is classified as a partial failure, since the intended goals have not been achieved (CSDMS 2008; Ciborra 2005; Elsheikh et al. 2008). As pointed out by CSDMS (2008), the Jordanian government has failed to achieve most of its e-government objectives, particularly the goal of achieving rapid social and economic development. In addition, Jordan is still far behind many developing countries from utilizing ICTs in delivering public services and information online (Elsheikh et al. 2008).

- *Analysis*
  - **NeI Factor 1: Network Access**

Infrastructure Development: There are significant ICT infrastructure barriers to promoting e-government implementation in Jordan (Al-Omari 2006; CSDMS 2008; Elsheikh et al. 2008). They include 'high cost of telecommunications services and lack of an adequate civilian telecommunications "backbone" network nationwide' (Al-Omari 2006, p. 849). Thus, the telecommunications infrastructure is still inaccessible to most parts of Jordan (Elsheikh et al. 2008). Moreover, due to insufficient technical preparation and planning before implementing the e-government initiative, there has been duplication of effort and the

installation of physical systems that do not connect efficiently and securely (Al-Omari 2006). As indicated by Elsheikh et al. (2008), 'developing an integrated approach to IT system architecture between ministries and across levels of government poses a serious challenge' to the Jordan e-government initiative (p. 95).

Resources and IT Support: One of the significant problems hindering the success of Jordan's e-government project is the scarcity of financial resources, which has reduced government capacity to build up technical infrastructures as well as to effectively coordinate systems and implement the project (CSDMS 2008; Elsheikh et al. 2008). Furthermore, there is a shortage of human resources in many technical areas such as system developers, website developers, and network experts (CSDMS 2008). This is mainly due to low technical readiness and low computer literacy among public employees (Ciborra 2005). The lack of financial resources and IT personnel has compelled the Jordanian government to seek a great deal of support from external donors and private firms for implementing the e-government initiative (CSDMS 2008; Elsheikh et al. 2008).

Utilization: Another significant barrier to the introduction of e-government in Jordan is the low level of Internet penetration, '0.7 percent of population in terms of account subscribers and 1.9 percent in terms of users' (Al-Omari 2006, p. 849). This problem is exacerbated by the relatively high cost of Internet access and telecommunications services (Al-Omari 2006; CSDMS 2008). In spite of low accessibility to the Internet, the Jordanian government has not established online accessed points for providing public services (Al-Omari 2006; Elsheikh et al. 2008).

o **NeI Factor 2: Network Learning**

Educational System: Since the Jordanian government has not placed a strong emphasis on creating e-society through education and integrating ICTs into educational processes, there is a shortage of skilled workers (Elsheikh et al. 2008). Therefore, the educational system needs to be reformed 'both to provide the resources for e-government development and to provide Jordan's IT sector with the skills necessary to become a leading contributor to economic growth and job creation' (Al-Omari 2006, p. 849).

Technical Training: There is the widespread lack of computer literacy among Jordanians. This has limited the participation of citizens, businesses, and government agencies in e-government (Al-Omari 2006; CSDMS 2008; Ciborra and Navarra 2005; Elsheikh et al. 2008). Although the Jordanian government has attempted to strengthen capacity and knowledge on ICTs and e-government throughout the region, more needs to be done (Elsheikh et al. 2008). At present, there are insufficient IT training programs in both the public sector and the community (Ciborra 2005; Elsheikh et al. 2008). Thus, the government needs to put more emphasis on capacity building through technical training programs, which could help build confidence and boost understanding among both citizens and public employees of the potential benefits offered by e-government (Al-Omari 2006; CSDMS 2008; Elsheikh et al. 2008).

o **NeI Factor 3: Network Economy**

Collaboration: To implement the e-government project, the MoICT is responsible for coordinating a number of activities with all other government ministries and departments (Ciborra and Navarra 2005). Nevertheless, 'each government agency is still in charge of its own digital transformation towards a more "customer-centric" approach in the delivery of services by means of appropriate technology, knowledge management and skilled staff' (Elsheikh et al. 2008, p. 89). Due to 'the *de facto* independence and autonomy of the Ministries' and 'the different practices in systems implementation', it is difficult for those government agencies to collaborate with each other (Ciborra 2005, p. 264). This lack of coordination is also exacerbated by the resistance to information and databases sharing among public agencies (CSDMS 2008).

Public-Private Partnership: To improve the delivery of public services, the government has consulted with and asked for feedback and suggestions from the private sector and other non-governmental organizations. In other words, the e-government project has been led by the private sector, in partnership with the government. These relations create innovative public-private partnerships (Ciborra and Navarra 2005; Elsheikh et al. 2008).

E-Community Creation: A lack of citizen awareness and participation is another major barrier to the successful implementation of e-government in Jordan. Currently, the general population and the public and private sectors have very limited knowledge of what e-government is and how to benefit from it (Al-Omari 2006; CSDMS 2008; Elsheikh et al. 2008). Hence, it is necessary for the government to employ various measures to increase citizen awareness of the benefits of e-government.

o **NeI Factor 4: Network Policy**

Laws and Legislation: Since the enabling legal framework for e-government deployment does not currently exist in Jordan, the government must develop effective legal and regulatory measures to support its e-government initiative so that it could be successfully implemented (Al-Omari 2006). Laws that make electronic processes legally equivalent to paper-based processes, such as laws on electronic transactions and electronic signatures, need to be created. These supportive laws and legislation can provide 'a secure computing environment to reduce the risks of unauthorized access that could lead to fraud, sabotage, and crimes associated with invasion of information systems and breaches of security and privacy' (Elsheikh et al. 2008, p. 94).

Strategies: The vision of the Jordan e-government initiative is 'to complement economic and social development by providing access to government e-services and information for everyone in the Kingdom irrespective of location, economic status, IT skills, and educational level' (Elsheikh et al. 2008, p. 88). Due to this clear vision, the top of the state (the King himself and the MoICT) have expressed high level of commitment to the e-government initiative (Ciborra 2005; Ciborra and Navarra 2005). The Jordanian government has accordingly launched a set of strategies and facilitated the required changes for the transformation through e-government (Elsheikh et al. 2008). However, the strategies for implementing e-government were not well-defined, since they do not respond to the

country's and the citizens' needs and match their profiles. Moreover, the government has launched several e-initiatives at the same time, including REACH, e-government, e-learning, and e-health. This has led to a loss of focus on any specific initiative, despite the fact that all initiatives that have been introduced are completely new to both the government and the citizens (CSDMS 2008).

Failure Case 2: SARI Project in the State of Tamil Nadu in India

- *Background*

Tamil Nadu is a rural state in southern India. Due to the barriers of distance and location to the provision of public services, the telecenters or kiosks providing e-government services were established in 12 out of the 84 villages (Kumar and Best 2006). According to Kumar and Best (2007), telecenters or kiosks are 'places or centers that provide shared public access to information and communications technologies for meeting the educational, social, personal, economic, and entertainment needs of the community' (p.1). They have been utilized as the primary instruments for providing e-government services to poor communities in rural areas where the ICT infrastructure is inadequate and the costs of individual access to the Internet are relatively high.

- *The Sustainable Access in Rural India (SARI) Project*

The SARI project, which was initiated in November 2001, is one of the first e-government projects in India aiming at establishing commercially sustainable telecenters in rural communities (Kumar and Best 2006; Kumar and Best 2007). The goal of the project is to promote 'rural social, economic, and political development by providing comprehensive information and communications services through computer and Internet kiosks in rural communities' (Kumar and Best 2006, p. 2). At its peak, this project established over 80 kiosks or telecenters in rural communities in Melur Taluk (an administrative unit within the district) of Madurai district in Tamil Nadu. A majority of the kiosks are owned and operated by local entrepreneurs, while some are operated by self-help groups from a local non-governmental organization. Those Internet kiosks offered the following e-government services: the applications for online birth, death, income, and community certifications; the ability to apply for senior pensions; and a program allowing citizens to lodge complaints and grievances with senior district officials and with the Chief Minister's cell in the state capital. All of these services were implemented through online forms which 'were completed by the community member and transmitted electronically to the local taluk office for processing' (Kumar and Best 2006, p. 2). The SARI project was successful in achieving its objectives of delivering e-government services for over a year. Despite the initial success, it failed to sustain operation over the long term. Since usage over time was low and the poorest people were not using the services, the e-government services offered by the kiosks had come to an end by December 2002 (Kumar and Best 2006). Thus, this e-government project can be classified as a partial failure under the type of "sustainability failure."

- *Analysis*
  - **NeI Factor 1: Network Access**

Infrastructure Development: To implement the SARI project, a Wireless-in-Local Loop (WLL) technology was used to provide Internet connectivity to rural villages. This Internet connectivity was offered to local communities at the kiosks. Nevertheless, this project 'did not aim at computerizing or transforming the back office operations connected with the processing of the e-government applications in the taluk office' (Kumar and Best 2006, p. 3). The taluk office simply received the applications transmitted electronically through the 12 kiosks, and then processes and delivers the services in the usual way; in other words, it still maintained manual hand written registers. Hence, the only procedural change that occurred in the taluk office was at the front end (Kumar and Best 2006). The lack of back-end infrastructure development made the e-government services ineffective.

Resources and IT Support: There was a lack of sufficient resources for sustaining the project. Inadequate financial resources had reduced the state government's capacity to develop technical infrastructures and to provide technical training to the government officials in the taluk office (Kumar and Best 2006). Moreover, the kiosk operators lacked long-term financial viability (Kumar and Best 2007). In terms of personnel, the taluk office staff lacked IT knowledge and skills. As pointed out by Kumar and Best (2006), 'the government officials were not trained adequately to understand and provide this new mode of service, and those who did gain knowledge and experience with time were shifted frequently to new locations' (p. 9).

Utilization: Due to citizens' low accessibility to the Internet, a number of telecenters were established to provide public services online. However, telecenter services were unaffordable for low-income people, who are a majority of the population in Tamil Nadu. As indicated by Kumar and Best (2007), the kiosks had served mainly those sections of the communities that enjoy a higher social status and are economically better off. This is the main reason why kiosk users constituted only 3-14 percent of the village population. If kiosk services had been provided more cheaply, the kiosks would have been more effective in serving a broader set of community members.

  - **NeI Factor 2: Network Learning**

Educational System: The high rate of illiteracy in the area of the project implementation is another reason why the project failed. According to Blattman, Jensen, and Roman (2003), the low level of education constitutes a substantial impediment in access, use, and affordability of telecenter services. This indicates that the state government of Tamil Nadu has not focused on both creating e-society through education and integrating ICTs into the educational system.

Technical Training: Initially, the SARI project provided training related to the e-government services to the taluk office staff. However, the training had been cancelled after the transfer of the Tahsildar (head of the taluk office). This was partly 'due to a lack of sufficient resources with the private-sector implementing partner responsible for the training' (Kumar and Best 2006, p. 9).

o **NeI Factor 3: Network Economy**

Collaboration: The effective e-government services provided through the kiosks were birth certificates and old age pensions. This was due to the fact that these two services required little interaction with other levels in the government hierarchy. In contrast, other services were not effective since they required coordination between different levels (Kumar and Best 2006). This indicates the lack of coordination among public agencies, particularly those at different hierarchical levels.

Public-Private Partnership: The SARI project had developed institutional partnerships with many public and private agencies for delivering its services, such as the Indian Institute of Technology, Georgia Institute of Technology, and n-Logue Communications. Nonetheless, there was a lack of proper evaluation and monitoring of the private project partners' performance. This is another major reason for the project's failure (Kumar and Best 2006).

E-Community Creation: Since a telecenter is a new resource in the community, the SARI project is intrinsically concerned with creating demand (Blattman et al. 2003). The kiosk operators played a crucial role in generating awareness of telecenter services as well as promoting adoption and use of those services (Kumar and Best 2006; Kumar and Best 2007). However, wider diffusion of the kiosks among rural communities which have a low socio-economic status requires local champions from within those communities, not just the kiosk operators who seem to be able to influence mainly those from their own communities. The absence of local champions from within the communities is one of the main reasons for low usage of the kiosks among local citizens (Kumar and Best 2007).

o **NeI Factor 4: Network Policy**

Laws and Legislation: There is no information indicating that the state government has established the enabling legal and regulatory framework for the implementation of e-government projects. The lack of laws that make electronic processes legally equivalent to paper-based processes might make citizens reluctant to use telecenter services. This may be another cause of the project's failure.

Strategies: The SARI project initially succeeded since it was established on a solid foundation with the full support of the state government in the form of written orders for starting its operations in the area. Another major reason for the project's initial success was the strong commitment of a dedicated Tahsildar, who was instrumental in motivating the staff to provide e-government services. Nevertheless, his transfer in January 2003 contributed significantly to the ultimate failure of the project. This was because the new official, who was appointed to replace him, did not have the same level of commitment for coordination and monitoring of the project (Kumar and Best 2006). In addition, the strategies for implementing

the SARI project were not driven by the specific needs of communities (Blattman et al. 2003).

Lessons and Recommendations for Thailand

Even though the ability of Thailand to reap the full benefits of e-government is still limited and is largely hampered by various barriers, the case studies provided above show that Thailand could take advantages of the ICT revolution by taking into account the critical factors contributing either to the success or failure of e-government. The case analysis provides the Thai government with many valuable and important lessons regarding the factors critical to the success and failure of e-government. In fact, there are a large number of key factors for e-government success and failure (Gil-Garcia and Pardo 2005). However, the analysis above falls within some of those factors as follows:

- *ICT Infrastructure*

The development of basic ICT infrastructure that is capable of supporting and enabling the implementation of e-government is an important key to e-government success (Basu 2004; McClure 2001; Ndou 2004). For e-government to succeed in Thailand which has suffered from the digital divide, it is first required to establish the necessary technological infrastructure, so that all citizens can have equal access to ICTs (Basu 2004; Dada 2006; Jaeger and Thompson 2003). In addition, since the Thai public sector still lacks common ICT standards and central infrastructure which are essential for e-government projects requiring information sharing, the more effective back-end infrastructure needs to be developed (Lorsuwannarat 2006). As shown in the analysis of success cases above, the Andhra Pradesh and Malaysian governments' strong emphasis on back-end infrastructure development has enhanced their public agencies' capabilities to provide seamless online services and transactions.

- *Financial Resources*

The feasibility of having a successful e-government project is directly depended upon 'the governments' overall ability and readiness to spend on the necessary information technology and related costs' (Basu 2004, p. 116). E-government failures in Jordan and Tamil Nadu clearly indicate that the government's inability to provide adequate financial resources is a major hurdle for e-government success. Thus, the Thai government must allocate sufficient funding for e-government by taking into account the specific needs of e-government projects, particularly those involving long-term funding requirements and collaboration among various agencies (Basu 2004; Gil-Garcia and Pardo 2005). Alternatively, some e-government projects may be outsourced in order to cut costs and thereby achieve more within financial constraints (Ebrahim and Irani 2005).

- *Human Resources*

The success of e-government projects in Andhra Pradesh and Malaysia illustrates that qualified staff and training schemes are necessary conditions for the existence of successful e-government initiatives (Dada 2006; Gil-Garcia and Pardo 2005; Ndou 2004). The required skill sets include not only ICT skills, but also managerial skills necessary to implement the reform and change in public administration (Culbertson 2005; Settles 2005). Since the Thai public sector has been characterized by the chronic lack of qualified personnel and inadequate human resources training, public agencies need to identify and provide the basic and specialist skills needed for effective e-government through vocational training for all public employees (Leitner and Kreuzeder 2005; Lorsuwannarat 2006; Ndou 2004).

- *Utilization of the Internet and Multiple Access Channels*

Delivering e-government services requires the high level of Internet penetration among citizens. However, in each of the four cases analyzed above, there is a low penetration of the Internet. The main difference between the success cases and the failure cases is the availability of multiple channels of access. Therefore, since Thailand has only 14.7 percent of population having access to the Internet and 7.6 percent having personal computers, e-government should not be limited to interaction through the Internet (UN 2008). Multiple channels of access to e-government services, such as interactive digital television, mobile devices, one-stop service centers, and public kiosks, are essential to supplement Internet use (Bhatnager 2002; Haldenwang 2004; Jaeger and Thompson 2003; McClure 2001; Ndou 2004; Pascual 2003).

- *Citizens' IT Literacy*

The case analysis clearly indicates that the success of e-government depends largely on citizens' IT literacy, which is necessary for enabling people to use and benefit from e-government applications. Thus, education and training initiatives must be considered as priority actions (Cloete 2005; Ndou 2004). Due to the fact that there is the lack of IT literacy among a majority of Thai people particularly those in rural areas, the government should invest more to develop human resources for ICT 'through increased use of ICT in educational institutions and through academic and training programmers that improve the employability of educated youths in the ICT sector' (Basu 2004, p. 118). Computer literacy training programs provided to community members in rural areas are particularly important, since they can enable the disadvantaged to use new facilities for accessing electronic information and services. This can help reduce the digital divide (Cloete 2005; Ndou 2004; Settles 2005).

- *Collaboration among Government Departments and Agencies*

As shown in the cases of Andhra Pradesh and Malaysia, good collaboration among government departments and agencies on developing systems to enable appropriate data sharing is critical to the success of e-government projects, particularly in interorganizational projects (Gil-Garcia and Pardo 2005; Jaeger and Thompson 2003). If government agencies often act as independent and autonomous units without taking into account what other agencies are doing like in the Jordan case, efforts to use technology to integrate or share data across multiple agencies for providing seamless services can be constrained (Gil-Garcia and Pardo 2005). Moreover, NECTEC – the central agency responsible for the implementation of

e-government initiatives in Thailand – needs to play a more active role in providing necessary guidance, facilitating planning for seamless services, clarifying data sharing arrangements, and addressing accountability issues.

- *Public-Private Partnership*

The cases of e-government projects in Andhra Pradesh and Malaysia also illustrate that collaboration between the public and private sectors is an important element in the e-government development process. This is because partnerships with the private sector can provide resources, skills, and capabilities that the government lacks (Bhatnagar 2002; Heeks 2003; Ndou 2004; Pascual 2003). However, to avoid the failure of e-government caused by a lack of proper evaluation and monitoring of private partners' performance like the case of Tamil Nadu, the Thai government needs to develop an effective e-government public-private partnership framework which covers all aspects of e-government development and implementation.

- *Citizens' Awareness*

A major success factor of e-government projects in Andhra Pradesh and Malaysia is the governments' determined effort to create e-community by raising citizens' awareness of e-government. According to Lorsuwannarat (2006), most Thai people do not use e-government for many reasons including unfamiliarity with ICT and concerns about privacy and security of information. Therefore, the Thai government should attempt to make citizens, especially those in rural areas, aware of what e-government is and how to benefit from it. The government should also lead the way to making Thai people confident that electronic transactions are safe and effective (Basu 2004). Various measures, such as promotional campaigns and digital playing fields, can be employed to increase citizens' awareness of e-government (Dada 2006; Zouridis and Thaens 2005).

- *Laws and Legislation*

As evident from the cases of Jordan and Tamil Nadu, restrictive laws and regulations developed prior to or in ignorance of technologies relevant to e-government can affect the success of e-government projects. An effective strategy for overcoming these challenges is to make necessary changes in legislation in parallel with the implementation of e-government (Gil-Garcia and Pardo 2005). In Thailand, a range of laws and regulations related to electronic activities have already been enacted. However, a majority of Thai people are still not confident of using online services due to concerns about privacy and security of information (Lorsuwannarat 2006). Therefore, to make e-government services gain widespread acceptance, the government needs to establish protections and legal reforms to further ensure the privacy, security and legal recognition of electronic interactions and electronic signatures (Ebrahim and Irani 2005; Ndou 2004).

- *Strategies*

Another important factor for the success of e-government initiatives is the establishment of a clear vision and a comprehensive strategy that is not only benchmarked on global best practices, but also tailored to local realities (Ndou 2004; Pascual 2003). The cases of Jordan and Tamil Nadu clearly show that e-government strategy which is not sensitive to local conditions can lead to failure. In addition, strong leadership and the demonstrated commitment of both politicians and public sector managers are critical to the success of e-government (Leitner and Kreuzeder 2005; McClure 2001; Ndou 2004; Pascual 2003). As analyzed above, a major factor behind the success of e-government in Andhra Pradesh and Malaysia is the presence of strong leadership with sustained commitment at all levels, from the political to the administrative. Therefore, to make e-government successful in Thailand, political leaders need to have the overarching vision and strong commitment. They have to make e-government a priority and guide transformation by putting it in a broader context. Then administrative leaders need to play a vital role in translating political vision into an effective strategy.

Limitations and Future Research

This paper has some limitations that need to be addressed. First, the notions of "success" and "failure" are highly subjective – viewed from different perspectives, one person's failure may be another's success (Dada 2006; Heeks 2002). Thus, the case studies analyzed in this paper are limited by the subjectivity of evaluation. Another limitation is that this paper is based on a small number of case studies. Hence, future research should be conducted to collect national data in other developing countries to empirically and statistically verify the NeI framework. The last limitation is that there are critical success factors other than the NeI factors, such as cultural and social factors, that may also be important to e-government implementation. Those factors, which are not considered in this paper, provide opportunities for additional research.

Conclusions

Nowadays, many governments in the developing world 'are moving away from traditional bureaucratic emphasis on departmental silos and information isolation to a new paradigm that emphasizes coordinated network building, external collaboration, and customer services' (Schelin 2007, p. 124). A strategic tool which has been widely utilized by developing countries to transform their public sectors into this new paradigm is e-government. While e-government presents great opportunities to developing countries for improved government performance and increased citizen satisfaction, it poses a range of challenges which need to be addressed (Krishna and Walsham 2005; Ndou 2004; Sudan 2002). Although those challenges have caused most e-government projects in developing countries to fail, the potential for e-government in those countries does exist, as the cases of Andhra Pradesh and Malaysia have shown.

Similar to other developing countries, Thailand has implemented e-government in the hope of achieving many promised benefits, including social and economic development. However, e-government in Thailand has been facing a number of challenges. Therefore, in order to avoid e-government failure, the Thai government should consider Thailand's positions in terms of the NeI framework and learn from other developing countries' e-government experiences, and then work out e-government implementation strategies that are appropriate for the country's unique conditions, needs, and obstacles (Chen et al. 2006; Karim 2003; Ndou 2004). Above all, in trying to achieve development goals through e-government, the Thai government should consider projects that would deliver the most benefits to the broadest number of people. If only a small number of people can gain benefits from e-government projects, the modernization of public agencies through e-government will be questioned as to whether it is a development or an illusion (Lorsuwannarat 2006).

References

Ahmad, M. B. and Othman, R. B. (2007), "Implementation of Electronic Government in Malaysia: The Status and Potential for Better Service to the Public" [Online], Available: http://www.intanbk.intan.my/psimr/articles/Article1%20-%20Full.pdf [Accessed 13 August 2008].

Al-Omari, H. (2006), "E-Government Architecture in Jordan: A Comparative Analysis," *Journal of Computer Science*, 2 (11), 846-852.

Ambali, A. R. and Hashim, R. (2007), "E-Government in Malaysia: Trends, Policy, Issues and Initiatives" [Online], Available: http://delivery.acm.org/10.1145/1330000/ 1328151/p441ambali.pdf?key1=1328151&key2=0418980221&coll=&dl=GUIDE &CFID=2068935&CFTOKEN=60579332 [Accessed 13 August 2008].

Basu, S. (2004), "E-Government and Developing Countries: An Overview," *International Review of Law Computers*, 18 (1), 109-132.

Bekkers, V. and Homburg, V. (2005), "E-Government as an Information Ecology: Backgrounds and Concepts," in *The Information Ecology of E-Government: E-Government as Institutional and Technological Innovation in Public Administration*, Victor Bekkers and Vincent Homburg (eds), Amsterdam: IOS Press, 1-20.

Bhatnagar, S. (2002), "E-Government: Lessons from Implementation in Developing Countries" [Online], Available: http://www.iimahd.ernet.in/~subhash/pdfs/ RDDAutumn2002.pdf [Accessed 10 August 2008].

Blattman, C., Jensen, R., and Roman, R. (2003), "Assessing the Need and Potential of Community Networking for Development in Rural India," *The Information Society*, 19 (5), 349-364.

Centre for Science, Development and Media Studies (CSDMS) (2008), "Reviewing Jordan's e-Government Development: Seven Years of Promise" [Online], Available: http://www.egovonline.net/articles/article-details.asp?Title=Reviewing-Jordan's-e-Government-Development:-Seven-Years-of-Promise&ArticalID=2065&Type =COUNTRY%20PERSPECTIVE [Accessed 1 September 2008].

Chadwick, A. (2006), *Internet Politics: States, Citizens, and New Communication Technologies*, New York: Oxford University Press.

Chen, Y. N., Chen, H. M., Huang, W., and Ching, R. K. H. (2006), "E-Government Strategies in Developed and Developing Countries: An Implementation Framework and Case Study," *Journal of Global Information Management*, 14 (1), 23-46.

Ciborra, C. (2005), "Interpreting E-Government and Development: Efficiency, Transparency or Governance at a Distance?," *Information Technology & People*, 18 (3), 260-279.

Ciborra, C. and Navarra, Diego G. (2005), "Good Governance, Development Theory, and Aid Policy: Risks and Challenges of E-Government in Jordan," *Information Technology for Development*, 11 (2), 141-159.

Cloete, F. (2005), "Maximising the Potential of Transforming Policy Failure into Policy Success: E-Government, the Digital Divide and E-Development," in *New Technologies in Public Administration*, Giorgio Petroni and Fanie Cloete (eds), Amsterdam: IOS Press, 113-132.

Culbertson, S. (2005), "E-Government and Organizational Change," in *Practicing E-Government: A Global Perspective*, Mehdi Khosrow-Pour (ed.), Hershey, PA: Idea Group, 83-109.

Dada, D. (2006), "The Failure of E-Government in Developing Countries: A Literature Review," *The Electronic Journal on Information Systems in Developing Countries*, 26 (1), 1-10.

Ebrahim, Z. and Irani, Z. (2005), "E-Government Adoption: Architecture and Barriers," *Business Process Management Journal*, 11 (5), 589-611.

Elsheikh, Y., Cullen, A., and Hobbs, D. (2008), "e-Government in Jordan: Challenges and Opportunities," *Transforming Government: People, Process and Policy*, 2 (2), 83-103.

Gil-Garcia, J. R. and Pardo, Theresa A. (2005), "E-Government Success Factors: Mapping Practical Tools to Theoretical Foundations," *Government Information Quarterly*, 22 (2), 187-216.

Haldenwang, C. V. (2004), "Electronic Government (E-Government) and Development," *The European Journal of Development Research*, 16 (2), 417-432.

Hammim, R. (2002), "Unisys: Malaysia Ahead in E-Government Solutions" [Online], Available: http://findarticles.com/p/articles/mi_hb5556/is_200204/ai_n21960694 [Accessed 13 August 2008].

Heeks, R. (2002), "Information Systems and Developing Countries: Failure, Success, and Local Improvisations," *The Information Society*, 18 (2), 101-112.

Heeks, R. (2003), "Most eGovernment-for-Development Projects Fail: How Can Risks be Reduced?" [Online], Available: http://unpan1.un.org/intradoc/groups/public/documents/NISPAcee/UNPAN015488.pdf [Accessed 10 August 2008].

Himmelsbach, V. (2002), "Malaysia a Potential Leader in Smart Cards, E-Government," *Technology in Government*, 9 (11), 14.

Jaeger, Paul t. and Thompson, Kim M. (2003), "E-Government around the World: Lessons, Challenges, and Future Directions," *Government Information Quarterly*, 20 (4), 389-394.

Jansen, A. (2005), "Assessing E-Government Progress – Why and What" [Online], Available: http://www.afin.uio.no/forskning/notater/7_05.pdf [Accessed 13 August 2008].

Karim, Muhammad R. A. (2003), "Technology and Improved Service Delivery: Learning Points from the Malaysian Experience," *International Review of Administrative Sciences*, 69 (2), 191-204.

Krishna, S. and Walsham, G. (2005), "Implementing Public Information Systems in Developing Countries: Learning From a Success Story," *Information Technology for Development*," 11 (2), 123-140.

Kshetri, N. (2002), "Providing Citizen Services Online: E-seva in Andhra Pradesh State of India" [Online], Available: http://www.iconnect-online.org/Stories/Story.import4918 [Accessed 28 August 2008].

Kudo, H. (2008), "Does E-Government Guarantee Accountability in Public Sector? Experiences in Italy and Japan," *Public Administration Quarterly*, 32 (1), 93-120.

Kumar, R. and Best, Michael L. (2006), "Impact and Sustainability of E-Government Services in Developing Countries: Lessons Learned from Tamil Nadu, India," *The Information Society*, 22 (1), 1-12.

Kumar, R. and Best, Michael L. (2007), "Social Impact and Diffusion of Telecenter Use: A Study from the Sustainable Access in Rural India Project" [Online], Available: http://mikeb.inta.gatech.edu/uploads/papers/328-1701-1-PB-1.doc [Accessed 4 September 2008].

Leitner, C. and Kreuzeder, M. (2005), "Organisational Changes, Skills and the Role of Leadership Required by eGovernment" [Online], Available: http://www.springerlink.com/content/5x4cvq299838rjf3/fulltext.pdf [Accessed 18 August 2008].

Lorsuwannarat, T. (2006), "Lessons Learned from E-Government in Thailand" [Online], Available: http://202.44.73.6/upload/file/KMGSPA/1_1KM_org/e%20Government %20in%20Thailand%20(Development%20or%20Illusion)%20(2006).pdf [Accessed 18 August 2008].

McClure, D. L. (2001), "Electronic Government: Challenges Must Be Addressed With Effective Management and Leadership" [Online], Available: http://www.gao.gov/new.items/d01959t.pdf [Accessed 29 August 2008].

Meijer, A. and Zouridis, S. (2006), "E-Government is an Institutional Innovation," in *Information and Communication Technology and Public Innovation: Assessing the ICT-Driven Modernization of Public Administration*, Victor Bekkers, Hein van Duivenboden, and Marcel Thaens (eds), Amsterdam: IOS Press, 219-229.

Mohamed, A. and Bakar, Syed H. S. A. (2004), "Evolution of Information Systems in Malaysia" [Online], Available: http://www.springerlink.com/content/nyjh2r1mubex2 wv4/fulltext.pdf [Accessed 13 August 2008].

Ndou, V. (2004), "E-Government for Developing Countries: Opportunities and Challenges," *The Electronic Journal on Information Systems in Developing Countries*, 18 (1), 1-24.

Office of the Public Sector Development Commission (OPDC) (2006), *OPDC Annual Report 2006*, Bangkok: OPDC.

Pascual, Patricia J. (2003), "e-Government" [Online], Available: http://www.apdip.net/publications/iespprimers/eprimer-egov.pdf [Accessed 10 August 2008].

Ramasamy, B., Chakrabarty, A., and Cheah, M. (2004), "Malaysia's Leap into the Future: An Evolution of the Multimedia Super Corridor," *Technovation*, 24, 871-883.

Riley, Tom B. and Sheridan, W. (2006), "Comparing e-Government vs e-Governance," *Digest of Electronic Government Policy and Regulation*, 29, 188-190.

Schelin, Shannon H. (2007), "E-Government: An Overview," in *Modern Public Information Technology Systems: Issues and Challenges*, G. David Garson (ed.), Hershey, New York: IGI Publishing, 110-126.

Settles, A. (2005), "What Skills are Needed in an E-World: E-Government Skills and Training Programs for the Public Sector," in *Practicing E-Government: A Global Perspective*, Mehdi Khosrow-Pour (ed.), Hershey, PA: Idea Group, 383-414.

Shafie, S. (2007), "e-Government Initiatives in Malaysia and the Role of the National Archives of Malaysia in Digital Records Management" [Online], Available: http://www.archives.go.jp/news/pdf/MrShaidin2.pdf [Accessed 13 August 2008].

Siddequee, N. A. (2007), "Public Service Innovations, Policy Transfer and Governance in the Asia-Pacific Region: The Malaysian Experience," *Journal of Administration and Governance*, 2 (1), 81-91.

Snellen, I. (2005), "Technology and Public Administration: Conditions for Successful E-Government Development. Some Introductory Observations," in *New Technologies in Public Administration*, Giorgio Petroni and Fanie Cloete (eds), Amsterdam: IOS Press, 5-19.

Stahl, B. C. (2005), "The Paradigm of E-Commerce in E-Government and E-Democracy," in *Electronic Government: Strategies and Implementation*, Wayne Huang, Keng Siau, and Kwok Kee Wai (eds), Hershey, PA: Idea Group, 1-19.

Stanforth, C. (2007), "Using Actor-Network Theory to Analyze E-Government Implementation in Developing Countries," *Information Technologies and International Development*, 3 (3), 35-60.

Sudan, R. (2002), "Towards SMART Government: The Andhra Pradesh Experience" [Online], Available: http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN005509.pdf [Accessed 28 August 2008].

UN (2008), *UN E-Government Survey 2008: From E-Government to Connected Governance*, New York: UN.

UNDP (2007), "Computer-Aided Administration of Registration Department (CARD), Hyderabad, Andhra Pradesh" [Online], Available: http://www.apdip.net/resources/case/in04/view [Accessed 29 August 2008].

Wah, K. (2007), "E-Government: Malaysia is now ranked 25th" [Online], Available: http://ecommerze.blogspot.com/search/label/e-Government [Accessed 13 August 2008].

Zouridis, S. and Thaens, M. (2005), "Reflections on the Anatomy of E-Government," in *The Information Ecology of E-Government:E-Government as Institutional and Technological Innovation in Public Administration*, Victor Bekkers and Vincent Homburg (eds), Amsterdam: IOS Press, 21-36.

Comparative Study on Growth and Efficiency of Vetiver Grass Strips in Preventing Soil Loss

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Abstract

Efficiency of Vetiver grass in preventing soil loss for agriculture farm, Ban Kok Phag Wan, Chat Trakan district, Phitsanulok province was investigated using 3 vetiver grass ecotypes (Monto, Roi-Et and Kamphaengpetch) with 3 experimental designs under different replications of rainfall simulation. The plots was on 9 percent of slope consists of ten 1.5x3 m plots with a plot of bare soil (control) and 9 plot replications of 2, 3 and 6 strips of vetiver grass vertical interval base on 3 vetiver grass ecotypes. Each strip of vetiver grass was planted in single row with 10 centimeter spacing, the height of vetiver grass was monthly measured. The amount of soil loss and run off was collected and compared under 15 minutes of rainfall simulation. At 4 months old, it was found that the Roi-Et ecotype showed the highest average, 155.8 cm, followed by Monto and Kamphaengpetch ecotypes were 105.4 and 103.2 cm, respectively. The maximum soil loss and runoff was occurred on bare soil plot. The minimum soil loss and runoff was in 6 strips plot of Roi-Et ecotype, which had 1.05 ton/rai and 18.50 litters with the same maximum efficiency, 94.3 and 49.3 percent, respectively.

Keywords: Vetiver grass, land degradation, soil erosion, runoff, rainfall simulator

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Introduction

Soil is one of the earth's most important natural resources, which an important part of the landscape and contributes to determine the way in which natural vegetation, crops and human settlements. However, the destruction degree of soil quality is far great than maintenance by human beings under rapid population growth and industrialization. Soil erosion is one form of soil degradation that may be a slow process that continues relatively unnoticed. Erosion from land area is generally related to accelerated erosion, where the natural rate has been significantly increased mostly by human activity. It affects all natural and human-managed ecosystems, including agriculture and forestry. When agricultural land is eroded, the soil loss may be reflected in lower surface water quality, damaged drainage networks and reduced crop production potential. To compensate for the loss, forests are cleared to provide needed agricultural land. Indeed, erosion is the major cause of the deforestation now taking place throughout the world (David and Nadia, 1998 : 416).

Soil erosion by water is a widespread problem throughout many slope areas in Thailand. Ban Kok Phag Wan, Chat Trakan district, Phitsanulok is one of agricultural community located on the slopes farmland. The majority population in community is poor rural people include women and men who are heads of households, small-scale farmers, landless farmers, small merchants, agricultural workers and laborers for rural service operators. With the limited farmland area, farmers are more likely try to use steeper slope hillsides to grow crops for agricultural products increases. Normally, their production is too low to enable them to maintain their families. A large number of small-scale subsistence farmers and their families have to seek off-farm employment or another income-generating activity to supplement household incomes. Therefore, finding the basic and easy way to keep the soil's natural productivity is managed in a sustainable way should be emphasized on this investigation. The cultivation of vetiver is simplicity technology, easy maintenance, and inexpensive, that farmers can handle themselves. His Majesty has continuously expressed ideas of using vetiver grass for soil and water conservation measurement. The first Royal Initiative given on 22 June 1991, a part of which is "… study and trial on vetiver planting to prevent soil erosion at the specific sites of various Royal Development Study Centers, particularly at Huai Sai and Khaohinsorn, as well as other appropriate locations should be conducted to a wide extent ..." (Suda et. Al, 2006 : 3) Vetiver grass has strong fibrous root system which rapidly penetrates deep into soil and develops into horizontally with a tightly knitted net. It can hold the soil together and serves as an underground wall which not only retards waterflow but also allows it to seep into the soil. The hedgerows will stop erosion caused by lower level contour and also capable to absorb plant nutrients and chemical substances. This method can improve their land and help soil and water conservation which the farmers will benefit.

The study aims to evaluate growth rate and determine the efficiency of Vetiver grass strips of difference Vetiver grass ecotypes and strips performance as barriers against runoff and soil loss on slope farm. These results could help the farmers of this community to avoid soil erosion which reduce the impacts of agriculture and the loss of valuable land.

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Nuttawut Kongkum and Pravit Hoonthong

Material and Method

The 10 sample plots were established on farm land with 8.76% of slope in Ban Kok Phag Wan, Chat Trakan district, Phitsanulok. Each plot was 1.5x3 m^3 with 15 cm of two months vetiver grass sprout, planted 10 cm apart between each sprout. Every plots were installed the collector for eroded sediment and runoff collection. Three difference vetiver grass ecotypes such as Monto, Kampeangpech and Roi-Et were used. There were three strip performances; 1) two strips which planted 1.5 m apart along a contour 2) three strips which planted 1 m apart along a contour and 3) six strips which planted 0.5 apart along a contour to create barrier of stiff grass that acts as a buffer and spreader of down slope water flow, and a filter to sediment (Fig.1, 2 and 3). The vetiver grass growth and based leave lengths in all treatments during four months field study were measured every month in cm, with each vetiver grass sprout trimmed down to 15 cm for starting. The survival rates were investigated every week during experiment and took a place of new vetiver grass sprout for the death one.

For the efficient soil erosion and sedimentation protection, the experiment carried out after four months of vetiver grass growth by using rainfall simulator. The three plane-jet nozzles used on this simulator is Cyto 318-BB-SS27 and a water pump of Hino 30 AC with 17 Bar. The nozzle lined 2 m above the floor (Fig.4). Diameter of the rainfall simulator was established fit to the plot, allowing rainfall to cover treatment area. The sediments loss and runoffs were measured in each treatment plot for 5, 10 and 15 minutes of simulated rainfall event (58.1, 117.2 and 174.1 L of rainfall) with 3 replications for each period under dry run. The plot runoff in millimeters was calculated. After thoroughly stirring the content of the runoff collectors, the sediment losses were filtrated and weighted, while runoff volumes were measured. The collected sediment samples were sun dried at experimental site and taken to Pibulsongkarm Rajabhat University for oven dry weights and for calculating the total dry soil loss. The runoff collecting cans were emptied and cleaned after each measurement to make them ready for the next rainfall event. Then, the most appropriate ecotype of vetiver grass and pattern to protect soil erosion in this area base on the results comparisons was selected.
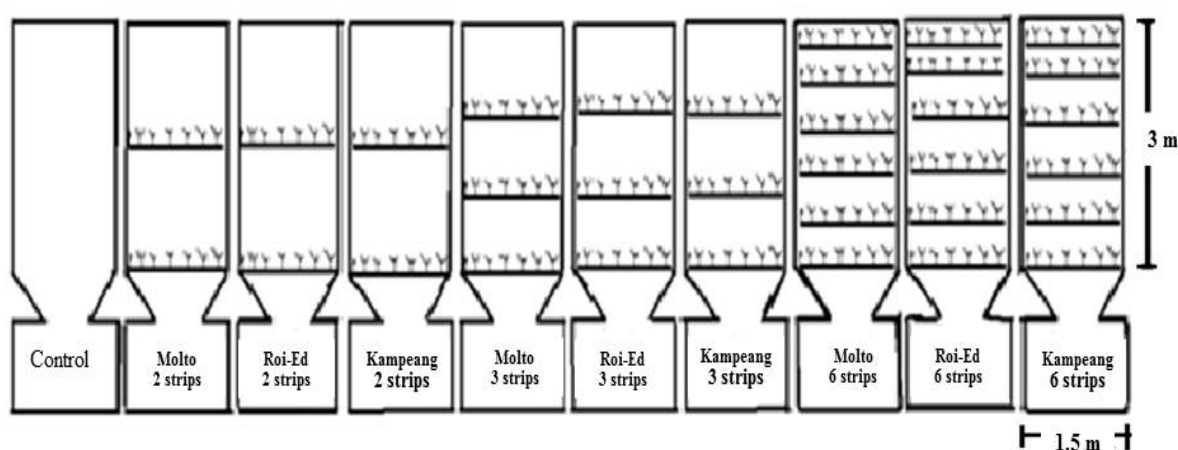
Figure 1: Ten plots were established on farm land with 8.76% of slope
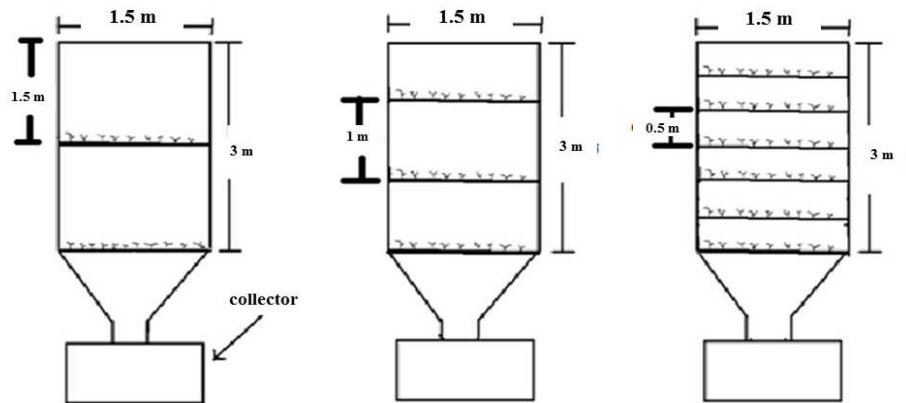
Figure 2: The vetiver grass strip performances; 2, 3 and 6 strips along the contour

Figure 3: The experiment was established on the farm land
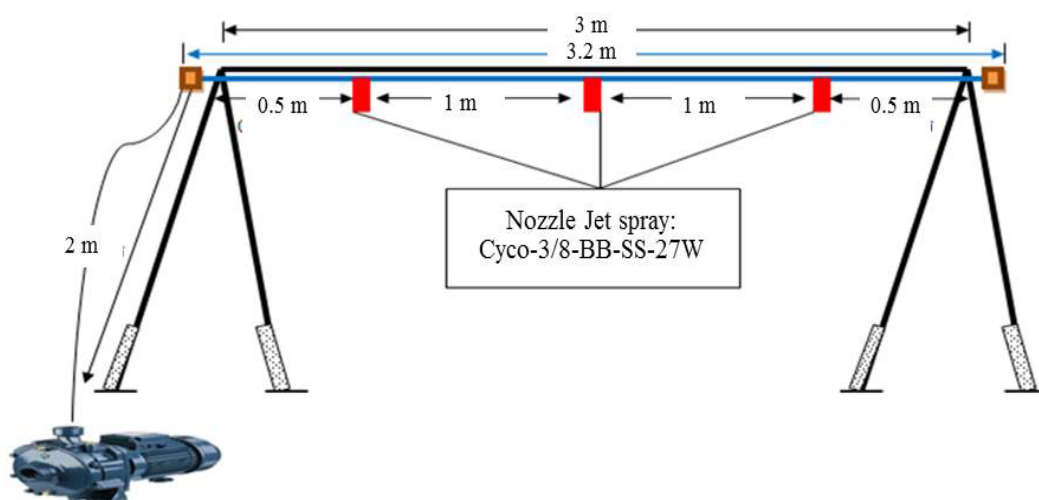
Figure 4: The rainfall simulator

Results

Evaluation of Vetiver Grass Growth

Vetiver grass growth recorded during four months showed that Roi-Et ecotype was the fastest growing on loamy sand soil. At the fourth month, Roi-Et ecotype growing was up to 155.79 cm high, which was significantly higher than Monto and Kampeangpech ecotypes, respectively (Figure 5 and Table 1). According to Nualchavee (2007: 12-23) suggested that Roi-Et was suitably grow in sandy soil.

Survival rate of Roi-Ed, Monto and Kampeangpech were 97.40, 91.55 and 77.92%, respectively (Figure 6).
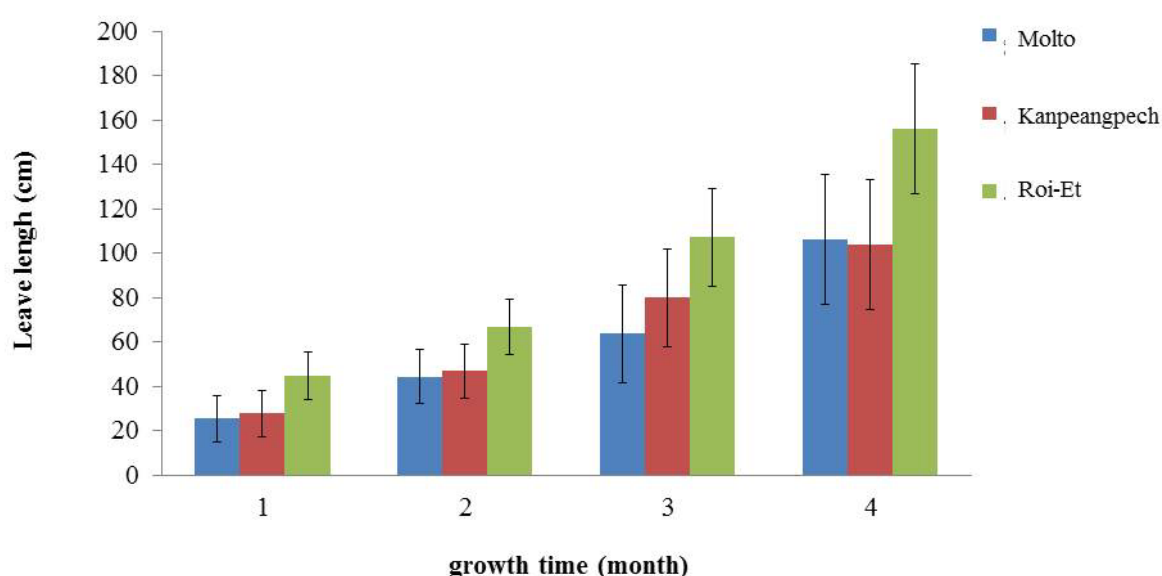
Figure 5: The leave lengths of three vetiver grass for four months

Table 1: Growth comparisons of vetiver grass for four months field study measurement.

Vetiver grass Ecotype	Height (cm)			
	1st month	2nd month	3rd month	4th month
Monto	25.42 ± 0.26^a	44.44 ± 0.59^a	63.68 ± 0.19^a	106.28 ± 0.20^a
Kampeanpech	27.84 ± 0.55^b	46.98 ± 0.60^b	79.94 ± 0.67^b	103.95 ± 0.29^b
Roi-Et	44.79 ± 0.70^c	66.84 ± 0.21^c	107.27 ± 0.3^c	155.79 ± 2.00^c
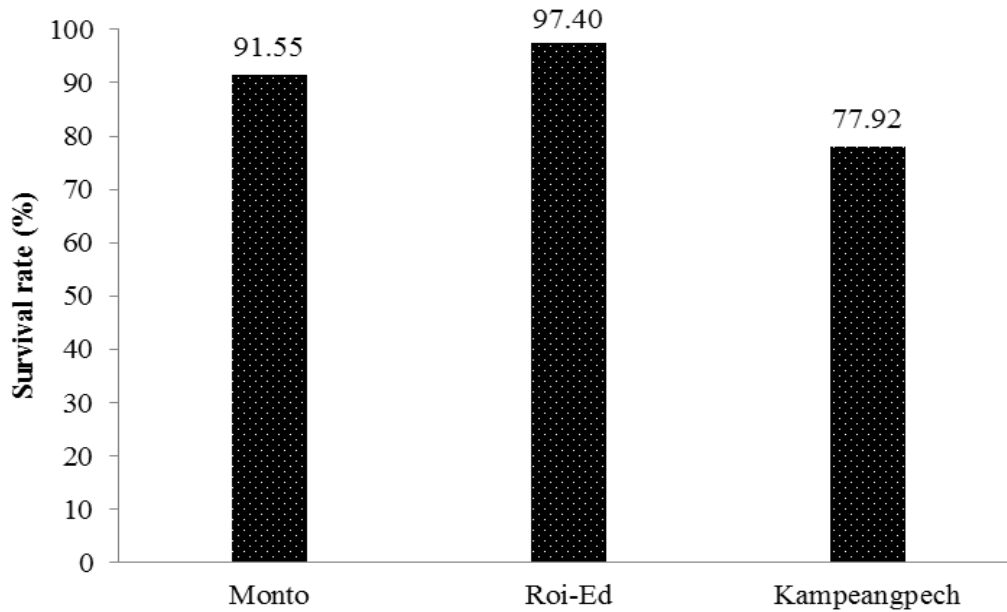
Figure 6: The survival rate of vetiver grass planted on loamy sand soil in study area

Evaluation of runoff and sediment losses

Runoff reduction

Average runoff values are presented in Table 2. Large rainfall simulation events affected the volume of runoff increasing. The volume of runoffs were decreased when had more vetiver grass strips in a plot. All period of experiments shows that 2, 3 and 6 strips of Kampeangpech treatments had the highest average volume of runoff, 7,745.33, 13,694.33 and 30,159.67 ml under 5, 10 and 15 minutes of rainfall simulation event, respectively. Roi-Et was the best vetiver grass ecotype to decrease the volume of runoff, especially on the plot of 6 strips of vetiver grass hedgerows, only 4,571.00, 9,553.00 and 18,501.00 ml under 5, 10 and 15 minutes of rainfall simulation event, respectively. Table 4 shows that efficient of runoff protection of Roi-Ed treatment by 49.30% was significant higher than other treatments ($\rho < 0.05$). Kasozi (1997: 255-257) referred that establishing vetiver on contour lines, the embankment of both cut and fill sloped soil can be effectively stabilized. The deep-root system stabilizes the slope, while the hedges reduce runoff, increase infiltration and trap sediment. This provides a very favorable environment for planting crops on the slopes.

Sediment loss reduction

The soil loss results after carried out under different rainfall simulation events are presented in Table 2 and Table 4, respectively. The sediment losses from the nine vetiver grass treatments were significantly lower than that the control treatment. The lowest sediment loss was recorded from 6 strips of Roi-Et. This was because of several factors such as vetiver grass reduced velocity of runoff due to a relative roughtness protected to the flow by its stems and leaves. This can increase rate of infiltration into the soil. Morover, the vetiver grass limited the capacity of runoff to detach and transport soil particles, these effect on runoff volume and velocity, and the physical protection of the soil from the runoff. The organic matter that gain from decayed leaves, stems and roots of the vetiver grasses by microbial

activity increased stability of soil aggregate which increase a soil permeability and infiltration. This can reduce runoff and soil loss because the stability of the soil aggregates affected their detachability by rain drop impact and their detachability and transportability by runoff (Styczen and Morgan, 1995: 496-509). Foster (1982) stated that sediment transport through grass strips diminishes exponentially with increasing grass width (Humberto et. Al, 2004: 1670-1678). The percentage reduction soil loss when compared with control treatment, Roi-ed reduced sediment losses in all performance and rainfall simulation events (Table 4). However, all vetiver grass strips treatment could significant help to protect sediment losses more than 70% when compared with control plot. Chengchun et al. (2003: 349-357) staged that a good hedge will reduce rainfall runoff by as much as 70% and sediment by as much as 90%.

Table 2: Runoff of each plot under different rainfall simulation event

Vetiver grass ecotype and performance	Average runoff[1/] (ml.)		
	5 mins	10 mins	15 mins
Control plot	9,259.67 ± 2.60 [a]	18,250.00 ± 8.66 [a]	36,494.33 ± 2.96 [a]
Monto (2 strips)	7,301.00 ± 4.39 [b]	14,961.67 ± 9.62 [b]	29,938.00 ± 3.51 [b]
Roi-Et (2 strips)	7,069.33 ± 17.62 [b]	13,694.33 ± 3.76 [b]	27,374.67 ± 6.77 [b]
Kampeangpech (2 strips)	7,745.33 ± 2.60 [b]	15,090.67 ± 5.21 [b]	30,159.67 ± 2.60 [b]
Monto (3 strips)	6,105.33 ± 7.54 [c]	11,204.00 ± 8.72 [b]	23,403.00 ± 4.36 [c]
Roi-Et (3 strips)	6,033.00 ± 6.36 [c]	10,054.00 ± 6.66 [b]	21,092.33 ± 2.85 [c]
Kampeangpech (3 strips)	6,430.33 ± 1.45 [c]	12,863.33 ± 6.01 [b]	25,722.67 ± 1.45 [c]
Monto (6 strips)	4,981.67 ± 2.40 [d]	9.762.67 ± 4.37 [c]	19,930.33 ± 0.88 [d]
Roi-Et (6 strips)	4,571.00 ± 7.55 [d]	9,553.00 ± 4.36 [c]	18,501.00 ± 5.57 [d]
Kampeangpech (6 strips)	5,128.00 ± 1.53 [d]	9,962.67 ± 4.37 [c]	20,522.67 ± 1.45 [d]

Note: [1/] Means within column followed by different letters are significantly different from each other (P<0.05).

Table 3: Sediment loss of each plot under different rainfall simulation event

Vetiver grass ecotype and performance	Average sediment loss[1/] (ton/rai)		
	5 mins	10 mins	15 mins
Control plot	2.08 ± 0.001[a]	6.55 ± 0.004 [a]	18.35±0.002 [a]
Monto (2 strips)	0.49 ±0.001 [b]	1.84 ±0.002 [b]	3.67 ±0.001 [b]
Roi-Et (2 strips)	0.41 ±0.002 [b]	1.58 ±0.001 [b]	2.78 ±0.002 [c]
Kampeangpech (2 strips)	0.62 ±0.001 [c]	2.80 ±0.001 [c]	4.63 ±0.003 [d]
Monto (3 strips)	0.33 ±0.002 [b]	1.21 ±0.001 [b]	3.00 ±0.001 [b]
Roi-Et (3 strips)	0.30 ±0.001 [b]	1.05 ±0.002 [b]	1.74 ±0.001 [e]
Kampeangpech (3 strips)	0.41 ±0.002 [b]	1.49 ±0.001 [b]	3.72 ±0.002 [b]
Monto (6 strips)	0.23 ±0.001 [d]	0.49 ±0.001 [d]	1.29 ±0.002 [e]
Roi-Et (6 strips)	0.20 ±0.002 [d]	0.47 ±0.001 [d]	1.05 ±0.001 [e]
Kampeangpech (6 strips)	0.28 ±0.003 [d]	0.59 ±0.001 [d]	1.58 ±0.001 [e]

Note: [1/] Means within column followed by different letters are significantly different from each other (P<0.05).

The Roi-Et distinctively showed highest reduction in runoff and soil loss of all performances and rainfall simulation events (Table 4). This was attributed to the fact that more leaves and stems growing retarded more runoff flow and filtered more sediment. Moreover, growth rate in width and height of Roi-Et vetiver grass was faster than that of the other two ecotypes,enabling it to develop a more effective barrier against runoff and soil loss (Sultan et al., 2006: 549 – 558).

Table 4: Efficient of vetiver grass strips for sediment and runoff protection

Vetiver grass ecotype	Efficient of sediment loss protection (%)			Efficient of runoff protection (%)		
	2 strips	3 strips	6 strips	2 strips	3 strips	6 strips
Monto	79.98±0.01[e]	83.67±0.01[d]	92.67±0.01[b]	17.97±0.02[e]	35.87±0.01[c]	45.39±0.01[b]
Roi-Et	84.85±0.01[d]	90.53±0.01[c]	94.26±0.01[a]	24.99±0.01[f]	42.20±0.01[b]	49.30±0.01[a]
Kampeangpech	74.77±0.02[f]	79.70±0.01[e]	91.40±0.01[b]	17.36±0.01[g]	29.52±0.01[d]	43.76±0.01[b]

Note: different letters are significantly different from each other ($P<0.05$).

Conclusion

The vetiver grass strips treatments were effective for controlling runoff and soil loss under rainfall on gentle land slope (8.76%) of loamy sand soil on where the experimental plots were established. The 6 strips of Roi-Et treatment was the best practice to protect sediment loss and runoff because of the fastest growing and tight clump of Roi-Ed ecotype and more vetiver grass strips has a superior capability to reduce soil erosion. However, all vetiver grass ecotypes and performances could be used as barrier against runoff and sol loss. Eventhough, we recommended that they should be rates as: Roi-Et>Monto>Kampeangpech and 6 strips>3 strips>2 strips in accordance with their effectiveness. Although many grasses, shrubs, trees and mechanical techniques have been used to prevent soil erosion over the years but the vetiver grass has stood the test of time. With its wide ranging tolerance of adverse climatic conditions, vetiver offers a simple low-cost technique that can help farmers solve their biggest problem, soil erosion. Therefore we highly recommend planting vetiver grass not only in this study area, but also worldwide. Let us join hands to support the vetiver grass and its users.

Acknowledgement

Reffrences

David, P. and Nadia K., (1998). Ecology of Soil Erosion in Ecosystems. Ecosystems. 1: 416–426.

Nualchavee R. (2007). Vetiver in Thailand: General Aspects and Basic Studies. KU Science Journal: 25 (January-December): 12-23.

Kasozi, G. (1997) Vetiver grass: the hedge against erosion. World Bank. 255-257.

Humberto B.C., Gantzer, C. J., Anderson, S.H., Alberts,E.E. and Thompson, A. L. (2004). Grass Barrier and Vegetative Filter Strip Effectiveness in Reducing Runoff, Sediment, Nitrogen, and Phosphorus Loss. Soil Science Society of America Journal., 68 (September–October): 1670-1678.

Styczen, M. E. and R.P.C. Morgan. (1995). Engineering properties of vegetation, pp. 496-509. In: R. P. C. Morgan and R. J. Rickson (eds.). Slope Stabilization and Erosion Control: A Bioengineering Approach. Silsoe College, Cranfield University, UK.

Chengchun, K., Ziyuan, F., Xijing, W., and Figen, T. (2003/October). Design Principles and Engineering Samples of Applying Vetiver Eco-engineering Technology for Steep Slope and River Bank Stabilisation. The Third International Conference on Vetiver and Exhibition. Guangzhou, P. R. China. 349-357.

Sultan, W., Korchoke, C., Supakij, N. and Somjate, J. (2006). Effectiveness of Grass Strips as Barrier Against Runoff and Soil Loss in Jijiga Area, Northern Part of Somali Region, Ethiopia. Kasetsart J. (Nat. Sci.) 40 : 549-558.

Suda S., Sanguan P. and Kristsana T. (2006/October). People Participation on Using of Vetiver Grass for Soil and Water Conservation. The fourth international conference on vetiver - icv4: Vetiver and people. Caracas, Venezuela.

Tourism Development Strategies: A Comparative Case Study in ASEAN

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Abstract

This paper explores key development strategies for the tourism sector pursued by the Thai Government in comparison to those pursued by the Singaporean Government – analyzing key policies, implementation processes and outcomes. In doing so, it draws on key similarities and differences between the two development approaches and highlight strengths and weaknesses of each approach. Finally, the paper will discuss opportunities for the Thai Government to adapt critical success factors and lessons learned from the Singaporean case study to enhance sustainable tourism development in Thailand.

Keywords: Tourism Development Strategies, Thailand Tourism, Singapore Tourism, Government Tourism Policy, Comparative Case Study, Tourism Development Framework

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Introduction

Among the major economies in ASEAN, Thailand and Singapore have the best prospect in tourism industry with the highest average Share of Receipts from International Tourist Arrivals in GDP and the highest average growth in Receipts from International Tourist Arrivals between 2008 and 2011. These two countries also report the highest growth in Number of International Tourist Arrivals during this period, 10.11% for Thailand and 9.70% for Singapore.
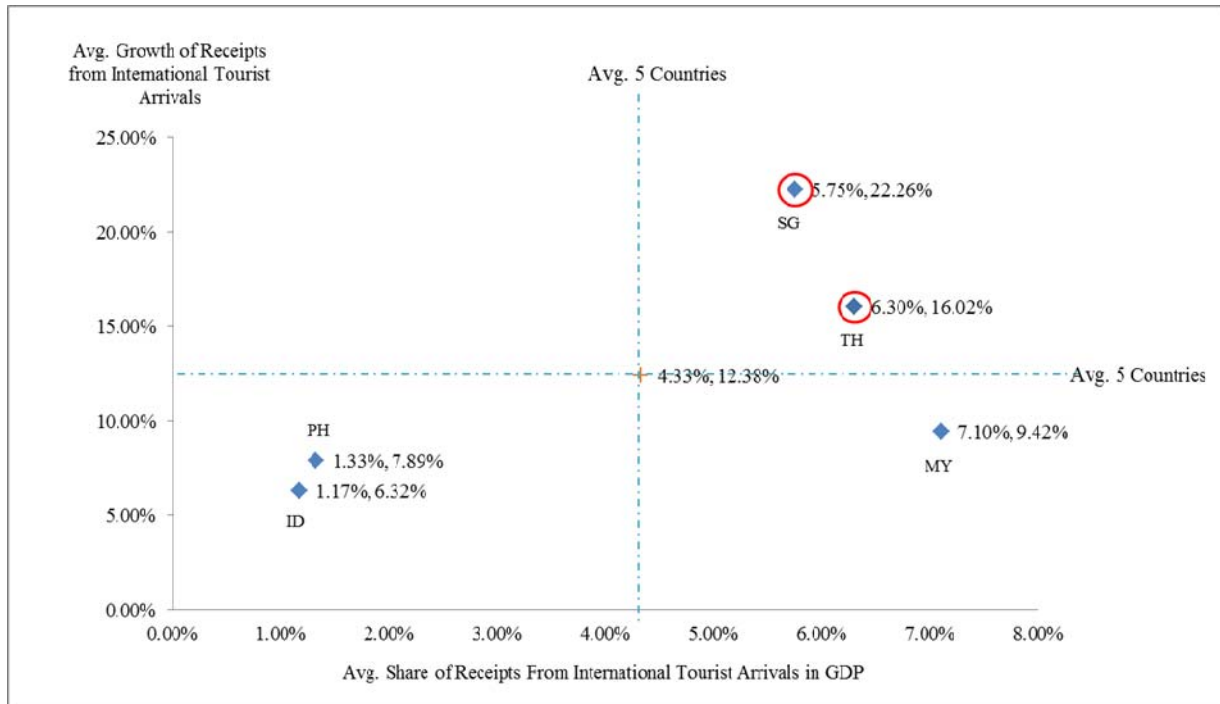
In terms of tourism development, Singapore and Thailand have strategic policies as well as supporting factors to enhance the country's tourism sectors. According to the latest Travel & Tourism Competitiveness Index (The Travel & Tourism Competitiveness Report, World Economic Forum); Singapore and Thailand are considered strong players in the world market. In 2013, Singapore ranked number 10 worldwide (remained from 2011) and number 1 in Asia Pacific (remained from 2011) whereas Thailand ranked number 43 worldwide (down from 41 in 2011) and number 9 in Asia Pacific (up from 10 in 2011). Singapore is at the highest ranking among ASEAN countries whereas Thailand is at the third place after Malaysia.

Therefore, it is sensible to conduct a comparative case study between Thailand and Singapore in order to draw on key similarities and differences between the two development approaches, and find opportunities for the Thai Government to adapt critical success factors and lessons learned from the Singaporean case study to enhance sustainable tourism development in Thailand.

Thailand's Tourism Development Strategies

Thailand's tourism development strategies can be summarized in the following table:

Government Agent	Tourism Authority of Thailand
Timeframe	2012-2013 (built upon 2008-2011 strategies)
Objective (2013)	"To maintain Thailand's brand image, marketing profile and visitor arrivals in a world of unprecedented change...ensure that the travel and tourism industry takes advantage of all the emerging opportunities while preparing itself to deal with any threats and challenges, both external and internal."
Target (2013)	International Tourist Arrivals = 22.22 million Foreign Exchange Revenues = THB 966 billion
Branding/ Positioning	Thailand as the Premier Tourism Destination, at the same time offered good value for money "To continue the concept to promote Thailand as a tourist destination with quality and a variety of attractions, offering impressive and valuable experiences."

Customer Segmentation	Use different criteria to segment customers
	
	1. Domestic Market – segmented by traveling purposes and demographic information
	
	2. International Market
	• Segmented by demographic information
	    - Family market
	    - Gen X market
	    - Gen Y market
	    - Lady market
	    - Senior market
	• Segmented by lifestyle
	    - Wedding and honeymoon market
	    - Golf market
	    - Health and wellness market
	    - Ecotourism market
	• Segmented by travel experience in Thailand
	    - First-time travelers
	    - Repeat travelers

Key Strategies & Campaigns	Resting on the theme 'Higher Revenue through Thainess', "TAT will attract tourists with the Charm of Thainess which includes Thai Experience, Thai Way of Life, and Thai Culture." The 2012-2013 strategies are neatly tailor-made for both domestic and international markets. The following action plans/campaigns are built upon the 2008-2011 phase to continue to enhance the image of Thailand as a valuable tourist destination.

1. Action Plan for Domestic Market

Focus on the following areas:

- Gain awareness of the importance of tourism in life among Thai people
- Tourism product and service sales stimulation
- Creation of inspirational travel themes based on site image and identity

Continue on the campaigns from 2008-2011 phase:

- 'Khon Lao Rueang Mueang Na Rak' – relate charms and local way of life in Thailand to one's journey to create learning-based and sustainable tourism
- 'Travel with a New Heart for Sustainable Thailand' – encourage travelers to cherish, protect, and appreciate the value of every site they visit.
- 'Season Change' – special discounts on tour programs, accommodation, transportation, healthcare, etc. for eldery members
- 'The Thailand Tourism Festival' – an annual exhibition held at Impact Meung Tong Thani to boost domestic tourism
- 'Fly and Drive' – partner with airlines, car rentals, banking and insurance companies etc. to offer 'One Price for Two' in selected routes

2. Action Plan for International Market

Continue on the campaigns from 2008-2011 phase as well as seeking new opportunities

Existing campaigns

- 'Discover The Other You' – opportunity to discover another you by learning Thai activities such as Thai Boxing, rice farming, massage, Thai Performing Arts class and Thai cooking class
- 'Amazing Thailand Always Amazes You' – build up the country's strong brand and positioning as a destination that offers tremendous value-for-money, a unique culture, and a wide variety of experiences to visitors.

New opportunities – luxury market

Put more effort to increase first-time visitors and high spenders

- Golf marketing – promote Thailand as a world class golfing destination with the golf tournaments from overseas market
- Wedding and Honeymoon – promote Thailand as a dream land for couples with special tour packages: 'Say Yes Again in Your Thailand Honeymoon' (Europe), 'Romance in Thailand' (Asia), and 'Thailand Together Forever' (USA)
- Health and Wellness – build standards and services ensuring Thailand is up to international standards with Thai Hospitality.
- Ecotourism – use social media to promote 'Go Green Amazing Thailand' and 'Thailand Makes Differences' campaigns

New opportunities – AEC

- Initiate the 'Thailand and Beyond Strategy' to prepare for an increasing number of visitors especially from AEC members (600 million populations) along with ASEAN +3 (China, Japan, Korea) and ASEAN +6 (Russia, India, Australia)

	3. Marketing Strategies
	"...ensure creativity and visibility by highlighting Thailand's unique strengths, and undertake campaigns that target the right customer with the right message and right product at the right place at the right time." Main communication channels are: - Trade shows and road shows in existing and new markets - Digital media e.g. partner with private sector such as hotels to create specific advertising channel, launch cutting edge e-marketing applications - Global media e.g. sports and special-interest TV channels, specific business newspaper/magazine - Celebrity marketing as brand ambassador **4. Supporting Private Sector** TAT to provide the following support to private sector: - Tourism intelligence: develop research skills to help private sector identify emerging trends and opportunities - Crisis management: to help private sector prepare for and react efficiently and promptly to the increasing number of global crises - Organize training/seminar sessions for private sector. Topics include consumer trends, emerging markets and demand planning, crisis management, corporate administration framework, etc. - Database development: create a 'pool of data' and a 'think tank' to share among private sector - Increase the number of strategic alliances
Budget	THB 4-6 billion per year

Source: TAT Annual Report 2008-2011, Tourism Authority of Thailand; "TAT Market Action Plan 2012", TTR Weekly; "Highlights of the Tourism Authority of Thailand Action Plan 2013", TAT News

Singapore's Tourism Development Strategies

Singapore's tourism development strategies are summarized in the following table:

Government Agent	Singapore Tourism Board
Timeframe	2005 – 2015 (10 years)
Objective	"To ensure that the tourism sector in Singapore remains competitive and continues to be a key contributor to the economy in the years to come."
Target	Tourism Receipts = SGD 30 billion Visitor Arrivals = 17 million Tourism-related Employment = 250,000 By 2015
Branding/ Positioning	Promote Singapore as: - a leading convention & exhibition city in Asia - a leading Asian leisure destination - the services center of Asia

Customer Segmentation	Segmented by traveling purposes 1. BTMICE: targeted at • Business • Travel • Meeting • Incentives • Conventions and Exhibitions 2. Leisure: targeted at families 3. Services: targeted at education and healthcare
Key Strategies	Focus on three main areas 1. **Greater Value Creation** "...differentiated quality experiences which are customised to the markets and deliver greater resonance among new and repeat visitors" *Campaigns & projects under this umbrella include:* • **Service that goes beyond the smile** – built upon the 'go the Extra Mile for Service' (GEMS Up) movement to enhance the quality and competitiveness of service sector • **Licensed to guide: delivering quality assured experiences** – established the Society of Tourist Guides Singapore and the NTUc Tour Guide Chapter to support professional tour guides • **Spicing up the attractions landscape** – initiated Integrated Resorts (IRS) to attract tourists; the two mega projects are Marina Bay Sands (MBS) and Resorts World Sentosa (RWS) • **Bringing the world together: a hub for business and leisure events** – host major international events • **Cruising on Southeast Asia's horizons** – differentiate from other ASEAN countries by offering cruising as a new way to explore Singapore • **Roadmaps for industry sustainability** – help private sector analyze and prepare 'business continuity plan' for internal and external challenges 2. **Understanding Our Visitors Better** "a shift towards a visitor-centric approach to developing the tourism sector, and become more targeted in our marketing approach" *Campaigns & projects under this umbrella include:* • **Differentiated marketing campaigns** – strengthening the 'YourSingapore' brand through 'New Discoveries', 'Get Lost and Find the Real Singapore', and 'Singapore – The Holiday You Take Home With You' campaigns • **Living louder than life again** – create personalized experiences for tourists • **Asia's fashion capital earns street cred** – collaborated with IE Singapore and Spring Singapore to provide "a holistic platform for designers, buyers, consumers and industry professionals to tap into Asia's burgeoning opportunities" • **Meeting evolving demands** – help private sector identify consumer trends and understand consumers' spending patterns in tourism industry • **Getting to know tomorrow's customers** – adopt 'intelligent business models' to learn about 'the travelers of the future' and find the ways to engage them

	3. Closer Industry Collaboration "...foster deeper industry collaboration with our stakeholders to strengthen our core competencies and raise overall industry capabilities" *Campaigns & projects under this umbrella include:* • **Bringing Singapore-inspired cuisine to the world** – collaborated with Singapore International Culinary Exchange (Spice), Singapore Takeout, Global Chef Exchange • **Coming together for the arts** – initiated 'Ticketcube' to raise the awareness of arts and entertainment events as well as increasing visitor attendance • **Homegrown collaborations** – "A quaint mix of tradition and modernity, Singapore's tourism precincts are a living illustration of how collaborations can result in compelling offerings that exude sophistication and appeal without losing the precinct's authenticity." • **Establishing partnerships overseas** – to leverage image of Singapore as a tourist destination in global market • **Singapore dining 2.0** – promote premium restaurants as part of traveling
Budget	S$2 billion Tourism Development Fund (TDF)...to stimulate and support private sector in four main areas 1. Infrastructure development 2. Capacity development in private sector – support local and international tourism-related businesses 3. Anchoring iconic/major events 4. Product development – private sector to propose their initiatives and in turn receive funding based on commercial capability

Source: Singapore Tourism Board Annual Report 2011/12, YourSingapore; "Singapore Sets Out To Triple Tourism Receipts To S$30 Billion by 2015", The Singapore Tourism Board, Singapore

Comparative Analysis between Thailand's and Singapore's Tourism Development Strategies

The comparative analysis to assess strengths and weaknesses of Thailand's and Singapore's tourism development strategies can be conducted using a framework of four dimensions as follows:

1. Segmentation Approach and Target Market: The way in which the government agency segments the tourist market and selects its target groups
2. Branding and Communication Approach: The way in which the government agency projects its image and positioning to the target market, as well as the channels used to communicate the key messages
3. National Resource Management: The ways in which the country manages its resources including natural, cultural and other intangible assets to differentiate itself from other tourist destinations
4. Alignment with Other Policies: The degree to which tourism development strategies are aligned with other key policies and supporting factors including legal framework, infrastructure development and private sector collaboration.

Thailand	Strengths	Weaknesses
Segmentation Approach & Target Market	Clear and detailed customer segmentation; each with solid marketing strategies and action plans Target both domestic and international markets, both first-time and repeating customers, both existing and emerging opportunities, every age & every income class, as well as various lifestyles	N/A
Branding & Communication Approach	Effective communication channels and powerful messages which bring about positive outcomes and growth Continuous campaigns >> reinforce strong messages to build up precise image of the country Have incentive programs to boost revenues e.g. promotional package, membership program, etc.	N/A
National Resource Management	Focus on Thai heritage – Thai Experience, Thai Way of Life, and Thai Culture as a 'unique selling point' that cannot be replicated by other countries	Lack emphasis on sustainable tourism despite abundance of natural resources
Alignment with Other Policies	N/A	Development of local transportation infrastructure still lacks behind tourism growth plan – especially foreigner-friendliness of public transport system Information services and infrastructure for tourists still needs improvement in terms of geographical and language coverage, as well as accessibility of internet Legal framework and implementation lack severity leading to negative experiences for tourists and loss of reputation as a tourist destination e.g. problems relating to safety, hygiene, resources conservation and environment issues Most strategies are communicated directly to customers (end users) but still lack strong collaboration between government and private sector as well as strong coordination among different businesses in the tourism value chain

Singapore	Strengths	Weaknesses
Segmentation Approach & Target Market	Strength in 'business tourism' which is the main purpose of international arrivals to Singapore	Tend to focus only on business tourism and international visitors
	Cross-selling between business and leisure tourism	Lack variety of journeys/attractions to cater to various lifestyles
Branding & Communication Approach	Differentiation though anchoring iconic events, conferences, exhibitions, etc.	Only see general marketing campaigns that communicate to customers in overall lacking a clear message and action planning for specific groups of customers
National Resource Management	Plan toward sustainability tourism development e.g. ecotourism innovations, business continuity plan	Most attractions are man-made; not many on natural and cultural traveling
Alignment with Other Policies	Strong collaboration between government and private sectors (both local and international players) with the government as the center of collaboration providing training and professional career as well as involvement in business planning & strategy	N/A
	Strong and foreigner-friendly information and transportation infrastructures to maintain standard of tourist experience	

The table below exhibits most recent results of the World Economic Forum's assessment of Thailand's and Singapore's Travel and Tourism Competitiveness – aligned with the aforementioned analysis.

Travel & Tourism Competitiveness Index 2013	Thailand		Singapore	
	Score (1-7)	Rank (1-140)	Score (1-7)	Rank (1-140)
Overall T&TC Index 2013	**4.5**	**43**	**5.2**	**10**
Overall T&TC Index 2011	4.5	41	5.2	10
Overall T&TC Index 2009	4.4	39	5.2	10
T&T Regulatory Framework	**4.5**	**76**	**5.7**	**6**
- Policy Rules and Regulations	4.4	77	6.0	1
- Environmental Sustainability	4.3	99	5.2	23
- Safety and Security	4.4	87	6.1	5
- Health and Hygiene	4.3	84	5.3	56
- Prioritization of T&T	5.0	33	6.1	4
Business Environment and Infrastructure	**4.3**	**44**	**5.3**	**4**
- Air Transport Infrastructure	4.6	21	5.1	14
- Ground Transport Infrastructure	3.8	62	6.5	2
- Tourism Infrastructure	5.2	31	5.0	38
- ICT Infrastructure	2.6	90	5.4	9
- Price Competitiveness in T&T Industry	5.0	25	4.6	66
T&T Human, Cultural and Natural Resources	**4.7**	**23**	**4.6**	**25**
- Human Resources	4.9	70	6.0	2
Education and Training	4.6	76	6.1	4
Availability of Qualified Labor	5.2	47	6.0	3
- Affinity for T&T	5.4	18	5.7	8
- Natural Resources	4.9	23	3.2	92
- Cultural Resources	3.6	36	3.6	35

Source: The Travel & Tourism Competitiveness Report 2013, The World Economic Forum

According to the latest Travel & Tourism Competitiveness Index, Thailand scores relatively lower than Singapore in the following criteria:

- Business Environment & Infrastructure TH 4.3 vs. SG 5.3
- Regulatory Framework TH 4.5 vs. SG 5.7

In Business Environment & Infrastructure category, Thailand scores fairly low in ICT infrastructure (2.6) and ground transport infrastructure (3.8).

In Regulatory Framework category, Thailand scores fairly low in environment sustainability (4.3), health & hygiene (4.3), policy rules & regulations (4.4), and safety & security (4.4)

On the other hand, Business Environment & Infrastructure as well as Regulatory Framework are highlighted as the critical success factors for Singapore's Travel & Tourism Competitiveness as they score above 5.0 in every sub-category. Therefore, we have opportunities to learn and adapt from the strengths of Singapore's tourism development strategies.

Tourism Development Strategies that Thailand can learn and adapt from Singapore

According to the comparative analysis between Thailand and Singapore's tourism strategies, the Thai government can consider the following lessons from the Singapore's case:

1. **Improvement of public transportation** will be key in facilitating the travelling experience and maintaining the strong reputation of Thailand as a tourist destination
2. **Improvement of information services and infrastructure** especially internet accessibility and coverage will become increasingly important to travel and tourism competiveness as more and more travelers depend on "informative connectivity" throughout their journey
3. Support of **English proficiency improvement** of personnel in the tourism sector will be key to enhancing the travelling experience
4. Given Thailand's strategic location, there is opportunity for the Thai government to **promote the country as a destination for business tourism** as well as cross-selling with leisure tourism which increase length of stay and revenue from tourism
5. **Promotion of sustainable tourism** (currently overlooked in Thailand) will ensure the country's rich resources remain a key competitive advantage in the long run.

In addition to the comparative case study between development strategies, further research should aim to comprehensively explore key strengths and weaknesses of Thailand as a tourist destination as well as investigate opportunities and threats affecting the country's tourism sector. In so doing, clear segmentation of tourists by demography and purpose of visit will be key in creating insightful and actionable development strategies to increase competitiveness of the Thailand's tourism sector.

References

General Information

Gross Domestic Product (GDP), *World Economic Outlook Database, The International Monetary Fund (IMF)*, retrieved from:
http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/index.aspx
The Travel & Tourism Competitiveness Report 2009-2013, *The World Economic Forum,* retrieved from: http://www.weforum.org/reports

Indonesia

Indonesia Tourism Statistics, *Badan Pusat Statistik (BPS-Statistics Indonesia), Indonesia,* retrieved from:
http://www.bps.go.id/eng/menutab.php?tabel=1&kat=2&id_subyek=16

Malaysia

Malaysia Tourism Statistics, *The Department of Statistics, Malaysia*, retrieved from:
http://www.statistics.gov.my/portal/index.php?option=com_content&id=1415&Itemid=111&lang=en

Singapore

"Singapore Sets Out To Triple Tourism Receipts To S$30 Billion by 2015", Media Releases, *The Singapore Tourism Board, Singapore,* retrieved from:
https://app.stb.gov.sg/asp/abo/abo08.asp
Singapore Tourism Board Annual Report 2011/12, *YourSingapore,* retrieved from:
http://www1.yoursingapore.com/annualreport/pdf/stb_ar_2012.pdf
Singapore Tourism Statistics, *The Singapore Tourism Board, Singapore,* retrieved from:
https://app.stb.gov.sg/asp/tou/tou03.asp

Thailand

"Highlights of the Tourism Authority of Thailand Action Plan 2013", Media Releases, *TAT News,* retrieved from:
http://www.tatnews.org/media-releases-2012/item/327-highlights-of-the-tat-action-plan-2013
TAT Annual Report 2008-2011, *The Tourism Authority of Thailand,* retrieved from:
http://www.tourismthailand.org/About-TAT/annual-report
"TAT Market Action Plan 2012", Media Releases, *TTR Weekly,* retrieved from:
http://www.ttrweekly.com/site/2011/07/tat-market-action-plan-2012/
Thailand Tourism Statistics, *The Department of Tourism, Ministry of Tourism and Sports, Thailand* retrieved from: http://www.tourism.go.th/
แผนพัฒนาการท่องเที่ยวแห่งชาติ พ.ศ. 2555-2559, *The Thailand Incentive and Convention Association (TICA),* retrieved from:http://www.tica.or.th/images/plan_tourism2555-2559/2555-2559.pdf

The Philippines

The Philippines Tourism Statistics, *Department of Tourism, The Philippines,* retrieved from:
http://www.visitmyphilippines.com/index.php?title=VisitorStatistics&func=all&pid=39&tbl=1
The Philippines Tourism Statistics, *The National Statistical Coordination Board (NSCB), The Philippines,* retrieved from:
http://www.nscb.gov.ph/sexystats/2012/SS20120606_tourism.asp

APPENDIX

Number of International Tourist Arrivals

Country	2011	Growth	2010	Growth	2009	Growth	2008	Avg. Growth
Thailand	19,230,470	20.67%	15,936,400	12.63%	14,149,841	-2.98%	14,584,220	10.11%
Singapore	13,171,303	13.14%	11,641,701	20.23%	9,682,690	-4.28%	10,116,054	9.70%
Malaysia	24,714,300	0.56%	24,577,200	3.94%	23,646,200	7.23%	22,052,500	3.91%
Indonesia	7,649,731	9.24%	7,002,944	10.74%	6,323,730	1.43%	6,234,497	7.14%
Philippines	3,917,454	11.28%	3,520,471	16.68%	3,017,099	-3.90%	3,139,422	8.02%

Average Per Capita Spending (Per Person Per Day)

Country	2011	Growth	2010	Growth	2009	Growth	2008	Avg. Growth	Currency
Thailand	137.32	6.68%	128.72	10.03%	116.99	-5.91%	124.34	3.60%	USD
Singapore	1,344.44	12.74%	1,192.51	32.81%	897.90	-16.97%	1,081.38	9.53%	USD
Malaysia	113.65	4.85%	108.39	10.03%	98.51	-7.66%	106.69	2.41%	USD
Indonesia	142.64	5.62%	135.04	22.17%	110.54	-19.53%	137.36	2.76%	USD
Philippines	91.88	9.47%	83.93	10.80%	75.75	1.13%	74.90	7.14%	USD
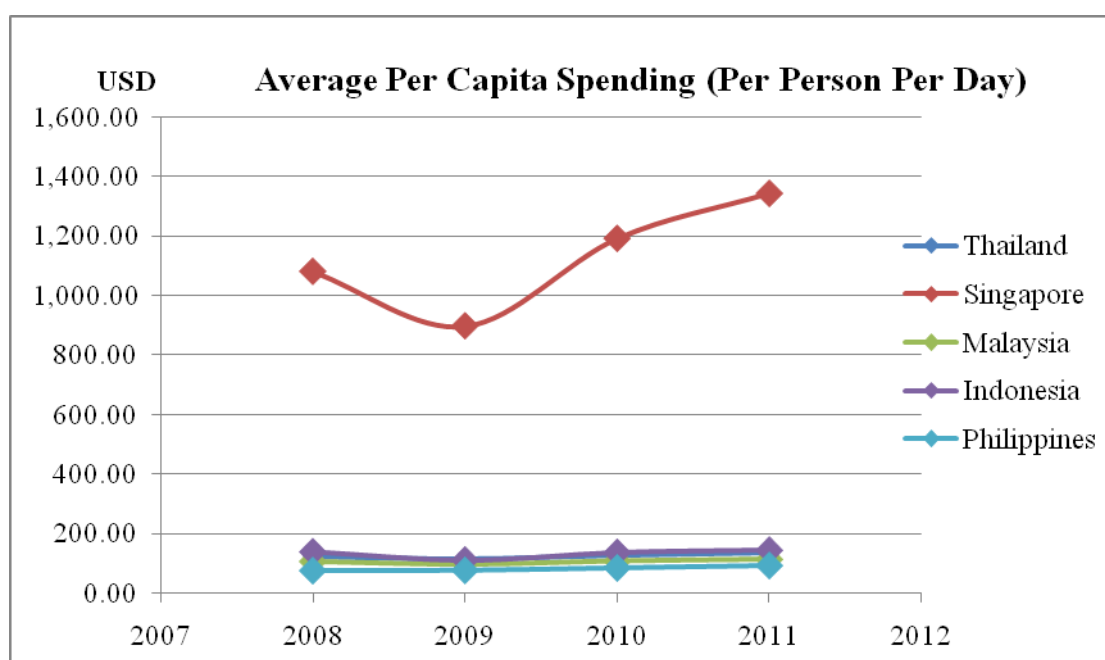
Average Length of Stay

Country	2011	2010	2009	2008
Thailand	9.64	9.12	8.99	9.51
Singapore	3.70	3.90	4.00	4.00
Malaysia	7.00	6.80	6.70	6.40
Indonesia	7.84	8.04	9.01	8.58
Philippines	8.04	8.01	8.83	9.40
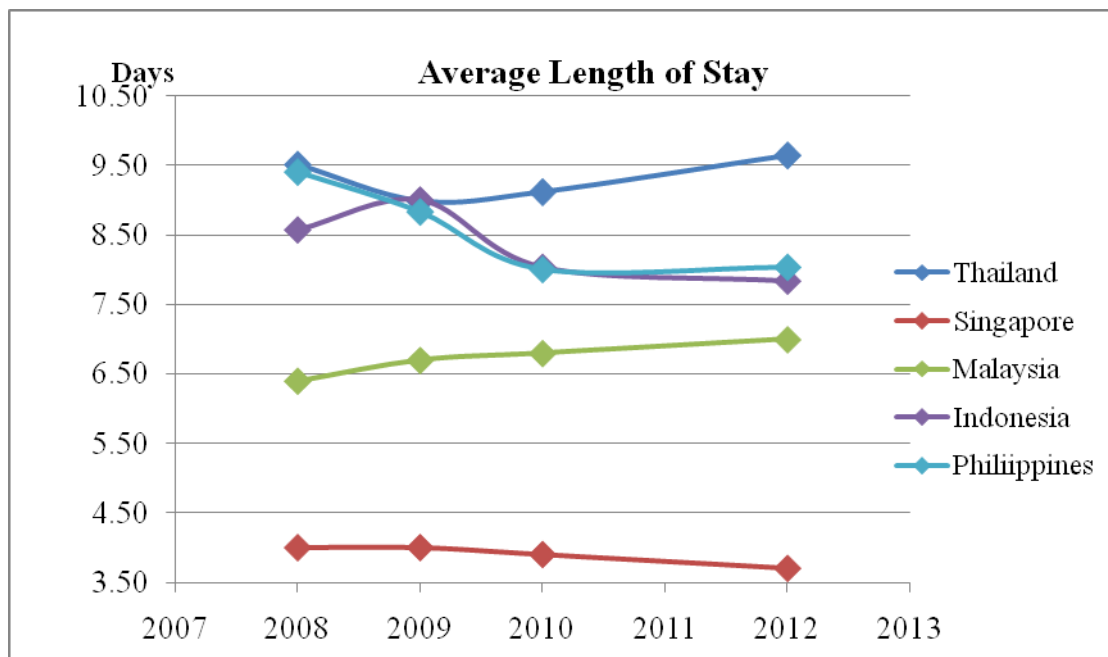
Receipts from International Tourist Arrivals

Country	2011	Growth	2010	Growth	2009	Growth	2008	Avg. Growth	Currency
Thailand	25,457	36.07%	18,709	25.71%	14,882	-13.71%	17,246	16.02%	Million USD
Singapore	17,711	27.57%	13,884	59.74%	8,692	-20.53%	10,937	22.26%	Million USD
Malaysia	19,661	8.54%	18,115	16.07%	15,607	3.65%	15,057	9.42%	Million USD
Indonesia	8,554	12.51%	7,603	20.73%	6,298	-14.29%	7,348	6.32%	Million USD
Philippines	2,994	20.23%	2,490	11.37%	2,236	-7.94%	2,429	7.89%	Million USD
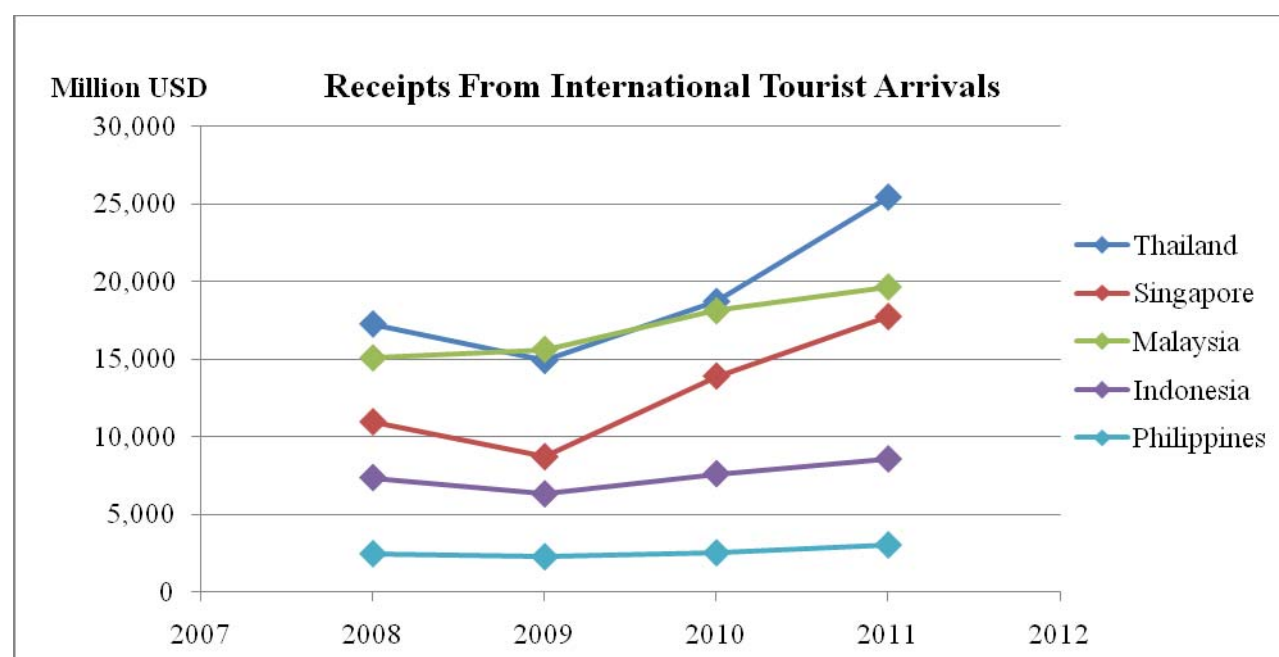
GDP (at Current Price)

Country	2011	Growth	2010	Growth	2009	Growth	2008	Avg. Growth	Currency
Thailand	345,672	8.39%	318,908	20.93%	263,711	-3.25%	272,578	8.69%	Million USD
Singapore	265,622	14.64%	231,697	22.70%	188,830	-0.92%	190,590	12.14%	Million USD
Malaysia	287,942	16.66%	246,829	22.02%	202,284	-12.46%	231,072	8.74%	Million USD
Indonesia	846,159	19.25%	709,543	31.69%	538,803	5.47%	510,839	18.81%	Million USD
Philippines	224,771	12.62%	199,591	18.46%	168,485	-2.95%	173,603	9.38%	Million USD
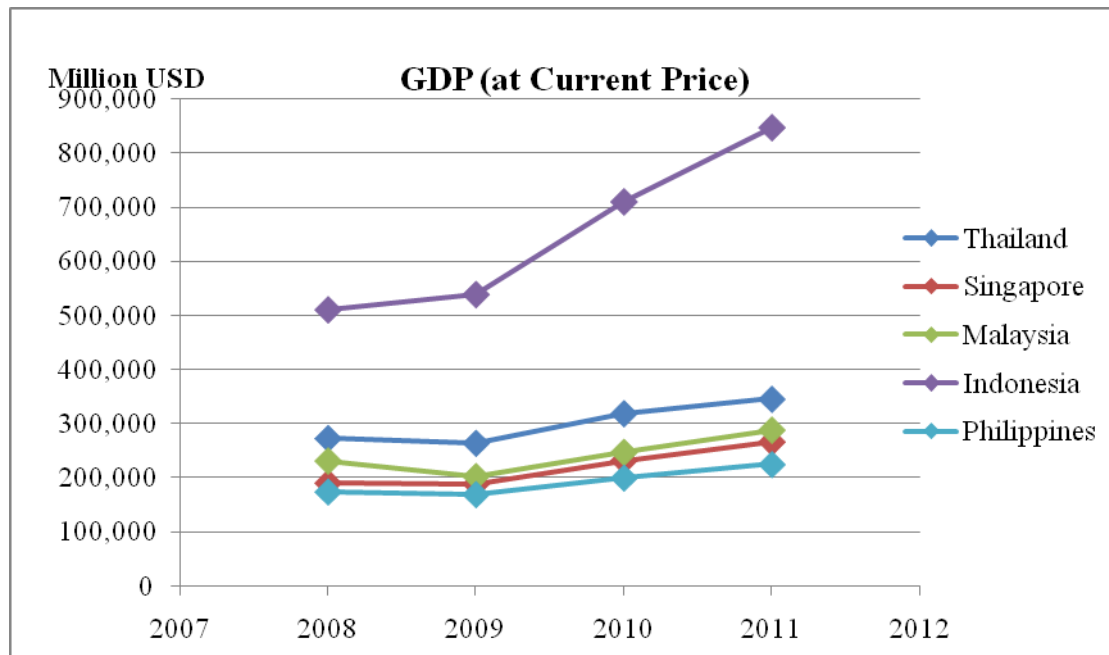
Share of Receipts From International Tourist Arrivals in GDP

Country	2011	2010	2009	2008	Avg. Share
Thailand	7.36%	5.87%	5.64%	6.33%	6.30%
Singapore	6.67%	5.99%	4.60%	5.74%	5.75%
Malaysia	6.83%	7.34%	7.72%	6.52%	7.10%
Indonesia	1.01%	1.07%	1.17%	1.44%	1.17%
Philippines	1.33%	1.25%	1.33%	1.40%	1.33%

Travel & Tourism Competitiveness Index 2013

Country/Economy	OVERALL INDEX			SUBINDEXES						
				T&T regulatory framework		Business environment and infrastructure		T&T human, cultural, and natural resources		
	Regional rank	Overall rank	Score	Rank	Score	Rank	Score	Rank	Score	
Singapore	1	10	5.23	6	5.74	4	5.31	25	4.64	
Australia	2	11	5.17	23	5.32	25	4.81	4	5.39	
New Zealand	3	12	5.17	4	5.75	12	5.06	22	4.69	
Japan	4	14	5.13	24	5.31	24	4.86	10	5.22	
Hong Kong SAR	5	15	5.11	19	5.43	3	5.32	29	4.59	
Korea, Rep.	6	25	4.91	38	5.02	17	4.98	20	4.74	
Taiwan, China	7	33	4.71	29	5.19	34	4.63	44	4.29	
Malaysia	8	34	4.70	55	4.82	41	4.36	17	4.93	
Thailand	9	43	4.47	76	4.47	44	4.25	23	4.68	
China	10	45	4.45	71	4.50	63	3.77	13	5.09	
India	11	65	4.11	110	3.92	67	3.69	21	4.72	
Indonesia	12	70	4.03	95	4.18	84	3.36	31	4.56	
Brunei Darussalam	13	72	4.01	94	4.18	57	3.94	67	3.91	
Sri Lanka	14	74	3.99	61	4.68	86	3.35	66	3.93	
Azerbaijan	15	78	3.97	46	4.94	87	3.34	96	3.63	
Vietnam	16	80	3.95	88	4.30	94	3.26	43	4.30	
Philippines	17	82	3.93	70	4.51	89	3.33	64	3.95	
Kazakhstan	18	88	3.82	62	4.66	79	3.48	119	3.30	
Mongolia	19	99	3.63	91	4.25	107	2.96	90	3.69	
Cambodia	20	106	3.56	105	4.06	112	2.86	78	3.77	
Kyrgyz Republic	21	111	3.45	93	4.23	131	2.61	103	3.51	
Nepal	22	112	3.42	100	4.14	128	2.64	105	3.48	
Tajikistan	23	114	3.41	90	4.28	123	2.69	122	3.26	
Pakistan	24	122	3.25	131	3.38	104	2.99	116	3.38	
Bangladesh	25	123	3.24	124	3.56	109	2.91	124	3.24	

Thailand Travel & Tourism Competitiveness Index 2013

The Travel & Tourism Competitiveness Index

	Rank (out of 140)	Score (1–7)
2013 Travel & Tourism Competitiveness Index	43	4.5
2011 Travel & Tourism Competitiveness Index	41	4.5
2009 Travel & Tourism Competitiveness Index	39	4.4
T&T regulatory framework	76	4.5
Policy rules and regulations	77	4.4
Environmental sustainability	99	4.3
Safety and security	87	4.4
Health and hygiene	84	4.3
Prioritization of Travel & Tourism	33	5.0
Business environment and infrastructure	44	4.3
Air transport infrastructure	21	4.6
Ground transport infrastructure	62	3.8
Tourism infrastructure	31	5.2
ICT infrastructure	90	2.6
Price competitiveness in the T&T industry	25	5.0
T&T human, cultural, and natural resources	23	4.7
Human resources	70	4.9
Education and training	76	4.6
Availability of qualified labor	47	5.2
Affinity for Travel & Tourism	18	5.4
Natural resources	23	4.9
Cultural resources	36	3.6

Singapore Travel & Tourism Competitiveness Index 2013

The Travel & Tourism Competitiveness Index	Rank (out of 140)	Score (1–7)
2013 Travel & Tourism Competitiveness Index	10	5.2
2011 Travel & Tourism Competitiveness Index	10	5.2
2009 Travel & Tourism Competitiveness Index	10	5.2
T&T regulatory framework	**6**	**5.7**
Policy rules and regulations	1	6.0
Environmental sustainability	23	5.2
Safety and security	5	6.1
Health and hygiene	56	5.3
Prioritization of Travel & Tourism	4	6.1
Business environment and infrastructure	**4**	**5.3**
Air transport infrastructure	14	5.1
Ground transport infrastructure	2	6.5
Tourism infrastructure	38	5.0
ICT infrastructure	9	5.4
Price competitiveness in the T&T industry	66	4.6
T&T human, cultural, and natural resources	**25**	**4.6**
Human resources	2	6.0
Education and training	4	6.1
Availability of qualified labor	3	6.0
Affinity for Travel & Tourism	8	5.7
Natural resources	92	3.2
Cultural resources	35	3.6

The Mae Yom: People's Participation in Irrigation Management

Voranong Kowitsthienchai[1]
Mohammad Rezaul Karim[2]

Abstract

The Mae Yom Operation and Maintenance Office was established in 1992 to manage water from the weir. The water supply of the weir for the irrigation covered the areas of 88,538 acres in a rainy season and 6,917 acres in a dry season. Water in the Yom River Basin had wildly fluctuated between flash flood in a rainy season and drought in a dry season. Local people were therefore affected from the non-secured water supply which led to repeated damage and poverty. In addition, water resources development has been assigned a significant priority in public investment strategies. In order to solve the problem, the Mae Yom Operation and Maintenance Office initiated Integrated Drought Prevention and Mitigation Project in 2005 with the purpose of providing benefits to various parties from an individual level to a global level, that is, farmers, local administrative organizations, relevant public agencies, Thailand, and the world.

Farmers gained opportunities from joint water management decision-making, water delivery scheduling, and water-taking rules specifying, thus encouraging a sense of ownership of farmers and enabling two-week quicker plot preparation. Farmers, moreover, cooperatively monitored work procedures with related public agencies, thus promoting transparency. The joint water management facilitated water delivery to farmers in a fair and equity manner, thus decreasing water conflicts and complaints from farmers. Furthermore, the initiative helped farmers to extend their dry-season agricultural areas.

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The increase of farmers' income helped alleviate the standard of living of farmers. This helped maintain agricultural careers and enhanced the food and energy security of the nation. In order to manage water effectively, equitably and sustainably, this initiative followed two strategies, (1) knowledge management and data dissemination; and, (2) three-coherent task mechanisms. This project follows some systematic stages to make successful. Royal Irrigation Department (RID) officials seek opinions and develop the consensus on participatory basis, good monitoring and evaluation system and promoting transparency. This mutual mechanism of people's participation in irrigation management leads to good governance.

Keywords: People's Participation, Irrigation Management, Good governance

Introductory Words

In the Royal Irrigation Department (RID) Strategic Plan 2004, this called for increased farmers' involvement in irrigation management. The RID pushed for an increase in participation of farmers, measured by the number of water user groups established by each regional office. The emphasis, though, was on quantity rather than quality of water user groups. Over two years, the number of water user organizations in Thailand jumped from about 10,000 to almost 15,000. Within the central agency, though, officials within the Development and Management of Water Working Group as well as the Institute for Development of Irrigation put forth plans to increase the degree of participation in irrigation management. It is noted that the Office of Public Participation Promotion was established in 2008 and the necessity lies with the words of Director of Phrae Provincial Irrigation Office.

> *"Problem we faced here about water situation and water management were flooding by the Yom River caused the damage and drought in a dry season in Phrae Province,"*

> *- Mr. Suraphol Achalanant, Director of Phrae Provincial Irrigation Office.*

Before 1998, farmers blocked and pumped water from irrigation canals at their will. During 1998-2003, the Mae Yom Operation and Maintenance (O&M) Office continually collected public opinions from farmers' meetings and personal communication from the field level. The farmers' meetings served as forums to notify farmers about irrigation related regulations, to recommend crop types for dry-season, and to inform drought risk areas. The public irrigation staff along with farmers removed a barrier before water delivery for the second crop season of the year 1998.

> *"There has been an increasing demand for water between farmers and water user groups lead to water competition"*

> *- Mr. Maethee Wutthicharoen*
> *Head of Allocation and Irrigation Management,*
> *Mae Yom Operation and Maintenance (O&M) Office.*

Phrae Province firstly announced a drought zone and installed the mobile pumping stations to pump water into irrigation canals in order to ease dry-season agriculture. The budgets were granted by the Phrae Province Disaster Relief Committee. Seven years later in 2005, drought and water shortage affecting agricultural productivity was addressed by implementing a participatory irrigation management model by arranging a series of community meetings to brainstorm and listen to farmers' recommendations. For this reason, the Mae Yom Operation and Maintenance Office initiated Integrated Drought Prevention and Mitigation Project with the purpose of providing benefits to various stakeholders from an individual level to organizational level, that is, farmers, local administrative organizations, relevant public agencies, Thailand, and the world. The mechanisms were then implemented in those areas for the first time.

The Mae Yom: An Overview

"Royal Irrigation Department is a leading organization in water resources development and integrated water management with the present irrigated area in the world top ten,"

-Royal Irrigation Department Vision.

Water management in Thailand emphasized and integrated river basin approach with the participation of various stakeholders. Thailand has declared national water agenda, water vision and water policy covering the mitigation of problem of water deficit, flooding, poor water quality and inefficient water management. The Yom River Basin is the 8th basin out of 25 basins of Thailand. Its catchment area is 5.8 million acres covering 10 provinces or 4.6% of the country area. The 459 mile long Yom River serves as the main river of the basin as shown in Figure 1.
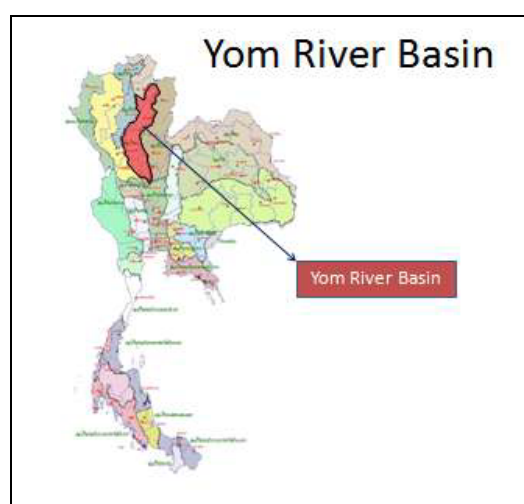
Figure 1: Areas of the Yom River Basin

The Yom River Basin accommodates 1,900,000 people, of which 612,000 people belong to an agricultural sector. The Gross Provincial Product (GPP) of an agricultural sector of the Yom River Basin achieves US$2,825.8 million. The average net income is US$131.6 per household per month. Farmers inside and outside of the irrigation areas gain the average incomes of US$318.6 and US$191.7per acre, respectively. In 1947, the Royal Irrigation Department (RID) constructed a concrete weir, 350m long, in the Yom River. The Mae Yom O&M Office was established to manage water from the weir. The weir supplies water for the irrigation areas of 88,538 acres in a rainy season and 6,917 acres in a dry season. The water supply covers 6 districts and 158 villages as illustrated in Figure 2.
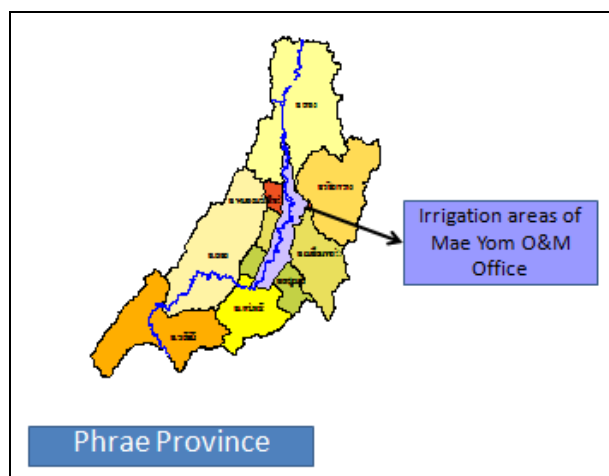
Figure 2: Irrigation Areas of the Mae Yom O & M Office

During a rainy season (May - November), the average maximum flow of the Yom River is 1,042 m3/sec or daily runoff 90 million m3 while the average maximum flow in a dry season (November - April) is 3 m3/sec or daily runoff 0.3 million m3 as depicted in Figure 3.However, farmers tend to extend their plots in a dry season every year. The agricultural areas for the dry season in 2011, for example, are 36,364 acres.
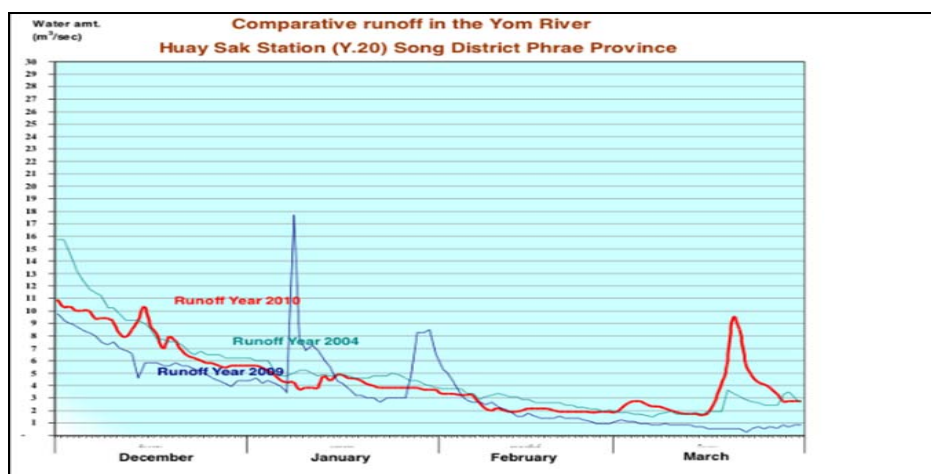
Figure 3: Comparative runoff in the Yom River during a dry season

Evolution of the initiative: Chronological Development of the Project

Year 1992 - 1998

The demand of the second crop farming was 8,909 - 21,372 acres. The Mae Yom O&M Office could not supply water for agriculture in a sufficient and timely manner. Thus, head-end farmers blocked a water body at will to divert water to their own plots while tail-end farmers subsequently removed those blockages. This certainly caused conflicts among farmers. An immediate solution from the Mae Yom O&M Office was to allow head-end farmers to pump water without blocking a water body. The number of pumps and pumping period, however, was uncontrolled. Water fights were still common in the areas. The Mae Yom O&M Office acted as a mediator which was considered as a reacting approach to the repeated drought.

Year 1999 – 2004

The requirement of the second crop season was 23,892 - 28,368 acres. The public irrigation staff made sure that the irrigation structures and canals were in good conditions and no blockage in the canals. Irrigation water was first delivered to tail-end farmers. However, the tail-end farmers received water only one time because of uncontrolled pumping of the head-end farmers. Tail-end farmers constantly struggled for water. In 2002, the damage of farming areas from drought was 2,767 acres.

Water allocation plan done by the public irrigation staff could not respond to farmers' needs in a sufficient and timely manner, especially for the tail-end farmers. This lesson learned made the Mae Yom O&M Office realize the importance of public participation in water management.

The Mae Yom O&M Office organized water user groups at ditch and canal levels. Each water user group set its own rules that were agreed upon among members. The water user group establishment assisted in controlling water use in the irrigation areas. Public consultation on water delivery plan and schedule plan was undertaken at different site visits and farmer meetings. The meeting resolutions were agreed to first deliver water to tail-end farmers and removed all barriers from the canals. Field crops were also promoted in the drought areas. Farming activities should be avoided from the areas that had no extra water sources. These were measures launched by the Mae Yom O&M Office to ease the drought impact.

Year 2003

The Mae Yom O&M Office prepared a map of dry-season agricultural areas from the RID's scale map 1:10,000 together with conducting field surveys by public irrigation staff. This map was used to manage water as well as monitoring water delivery in the areas. However, the map still lacks accuracy.

Year 2004

The Mae Yom O&M Office developed a database on water resources and irrigation systems based on the Landsat images. The Landsat images were also used for tracking dry-season agriculture in the areas.

Phrae Province firstly announced a drought zone and installed the mobile pumping stations to pump water into irrigation canals for supporting dry season agriculture. The budgets were granted by the Phrae Province Disaster Relief Committee.

Year 2005

According to the lessons learned, the Mae Yom O&M Office introduced three-coherent task mechanisms to the Phrae Province Disaster Relief Committee. The mechanisms were implemented in the areas for the first time. The Office, moreover, studied factors that influenced farmers in the areas to do farming. These helped farmers to receive water as planned. As a result, water fights in the areas were diminished.

Year 2006 – 2011

The Mae Yom O&M Office incorporated the up-to-date geographical information technologies into the following planning and water management decision-making. The project introduced zoning water management in water delivery planning in the areas; made a map of dry-season agricultural areas from Landsat images; organized a spatial database of the RID's mobile electrical pumping stations in the irrigation areas; provided a database of irrigation areas by using Geographic Information System (GIS) and Orthophotos; evaluated drought risk areas based on images from the national satellite called THEOS; monitored dry-season agriculture in the irrigation areas by applying the Asia-Pacific satellite called SMMS; and set a map of dry-season agriculture progress at zoning and sub-district levels. The maps serve as tools to follow and report drought assistance which facilitate the more effectiveness of the three-coherent task mechanisms and water management planning.

Nature of problems regarding internal and external factors as well as work alternatives was analyzed, as depicted in the following table, to seek appropriate solutions for drought prevention and mitigation. The lessons learned, local wisdom and database management were also used to be the sources of information to relieve drought via three-coherent task mechanisms. This helped enhance the efficiency of water management that was able to facilitate the dry season agricultural areas of 36,364 acres in 2010.

Concept of People's Participation in Irrigation Management

Increased farmer participation in irrigation is part of a world-wide trend of devolution in natural resource management. Experience shows that farmers all over the world are potential managers who, when properly organized, are able to manage their own affairs. Participatory irrigation management is increasingly viewed as a means to improve the performance of irrigation investments. Beginning in the 1980s, there have been large-scale programmes to turn over irrigation management from government agencies to organized water user groups in country. Irrigation management has become a matter of concern for planners, engineers, farmers and politicians. The need for farmers' participation in irrigation management is recognized.

Participatory Irrigation Management (PIM)

The term PIM refers to the participation of users –the farmers—in the management of the irrigation system. The Handbook on PIM defines Participatory Irrigation Management as the involvement of irrigation users in all aspects of irrigation management, and at all levels. All aspects include planning, design, construction, operation and maintenance, financing, decision rules and the monitoring and evaluation of the irrigation system. All levels include the primary, secondary and tertiary levels. A more comprehensive variant of PIM is Irrigation Management Transfer (IMT). IMT is the process of development of authority and responsibility from government agencies managing irrigation systems to private-sector entities (FAO, 2007: ix). PIM usually refers to the level, mode, or intensity of user participation that would increases farmer responsibility and authority in management process which build two forms of capital: productive capital (better maintained irrigation infrastructure) and social capital such as Water Users Associations (WUAs), skills, leadership and community action (Groenfeldt, 2003).

Process of participatory irrigation management

The participatory irrigation management in irrigation water delivery and maintenance activities is the irrigation management of the irrigation project at any scale, having farmers or irrigation water users participating in making decision in irrigation management and implementation of irrigation activities after setting agreement between RID and farmers, or even defining together later. The process of participatory irrigation management consists of 11 activities, as follows: (Rattanatangtrakul, 2006)

1. Public relation

The most important activity is to inform the two target groups clearly. One is RID officials who have to have through understanding all of the 11 activities. Another is farmers, local administrative organizations and relative agencies, which have to understand the principles, reasons, advantages, and roles, and also the PIM process.

2. Setting participatory agreement

In accordance with the principles, farmers would set the participatory agreement showing the attention and willingness. This is the formal starting point of the stakeholders to take part in the process.

3. Establishing water user's group (basic group)

After the participatory agreement is set, water users' group is established and formed having the farmers using water from the same ditch as the members. And after the election of water users' group leader, vice-leaders and committee, the group regulation and agreement for unanimous implementation would be defined.

4. Strengthening water user's organizations

There are many ways to encourage continuous understanding, e.g. meeting, study tour, seminar or workshop ideas and experience exchange, public hearing for more details of irrigation water management maintenance, agricultural and decision making for water management at every level. All of these activities are organized by RID officials.

5. Upgrading water user's organizations

After water users' group administration and irrigation water management are successful at water users' group level, the water users' group would be integrated and upgraded to be integrated water users' group, water users' association and water users' cooperatives, respectively.

6. Establishing Joint Management Committee

As the water users' organization is strong, the Joint Management Committee (JMC) is established so that there are representatives of 4 related agencies participating in irrigation water management and maintenance at the project level. At this step, the related agencies would join the meeting to know the meaning and the role of JMC, and also elect the JMC members. After election, it would propose to the governor to nominate the JMC. The orientation would be held for the JMC to understand their roles and responsibilities in details.

7. Establishing Irrigation Repair and Improvement fund (IRI fund)

For smooth the irrigation water supply and maintenance activities, Irrigation Repair and Improvement fund should be established for some expenses of water users' group by collecting money from both the water users' group members who use irrigation water and also non-farming persons such as industrial use.

8. Contracting out maintenance works

For irrigation system maintenance activity, some responsibilities are performed by the water users' group along with RID. RID tries to contract out the latter to the potential water users' group or local administrative organizations. After maintenance activities finish, the draft water delivery plan will be defined by the irrigation project and then proposed to the JMC for discussion and approval. After approval, the approved plan would be informed to the water user's group and also all the members.

9. Water delivery and maintenance participation

Water delivery and maintenance participation would start right after the water user's group and its members, local administrative organizations and the related agencies have clear understanding. The 14 sub-activities for ensuring water delivery and maintenance participation are as follows.

- Specify the irrigated area.
- Survey crops cultivation of water user's group.
- Adjust water delivery plan.
- JMC meeting for agreement of water delivery plan.
- Inform agreement on water delivery plan to water users' group and its members.
- Irrigation system maintenance.
- Deliver irrigation water, as defined in the plan.
- Strengthen water users' organization.
- Water measurement.
- Water users' organization report the actual cultivated area.
- Survey agricultural production and price.
- Compile the results of implementation.
- Evaluation by JMC.
- Reporting water delivery and maintenance participation.

10. Evaluating the strength of water users' organizations.

The evaluation of strength of water users' organization should be continually implemented for potential verification that the water users' organizations could manage by themselves or not. The farmers have to fill in the questionnaire and submit by September each year.

11. Basic data collection.

Basic data should be collected at the same time with the other activities to show the level of achievement.

Water Allocation and Irrigation Management

Irrigation development usually is a single purpose, only to provide irrigation water, without considering the possibility of development for the other purposes or at another location in the same river (Pasandaran, 1991). With the implementation of river basin development approach, the connections of one with other development need to be considered carefully in integrated and comprehensive ways, resulting optimal water use plan for various purposes.

The focus of water resources management has also shifted accordingly, from technology transfer towards decentralized and user-centred approaches emphasizing participation and local organizational development as explained by Clyma (1989), Uphoff (1986), and Korten (1984). This has changed the development problem in two ways: Firstly, the focus has shifted to the promotion of local water management through user organizations; secondly, design approaches have also shifted towards participatory design processes to support organizational evolution. More recently, attention has been shifted towards promotion of local governance and transfer of irrigation management to user groups commonly referred to as Water Users Associations (WUAs), has been central in the irrigation reform process (Vermillion, 1999; Meinzen-Dick et al, 2002, Johnson et al., 2002).

The RID now characterizes PIM as the involvement of both Water Users Organizations (WUOs) and local administrative organizations (LAOs) in decision making about irrigation management at all levels of an irrigation system. The Joint Management Committee for Irrigation (JMC) is responsible for managing water at the reservoir level. The JMC consists of the representatives of WUOs, regional irrigation office, LAOs, and relevant public and private agencies that affect from water allocation. Federated WUOs including IWUG, farmer group (FG), water user association (WUA), and water user cooperative (WUC) help manage water at the irrigation canals (i.e. primary, secondary, and tertiary canals). Basic WUOs, i.e. WUGs, direct water at the on-farm irrigation ditches. Through active participation, PIM activities are supposed to instill a sense of ownership in irrigation projects, influence sustainable operation and maintenance, and reduce conflicts between farmers and public irrigation officials (Royal Irrigation Department, 2005).

Situation of the Project

From the past, the RID had been the sole agency in charge of water management. Its tasks involved calculating water volume for cultivation, surveying demands of farmers in the project area, and planning for water irrigation as well as water supply periods for each canal. The result was inadequate water that failed to meet farmers' demand. Sometimes, water was not delivered in the designated period, coupled with a decrease in manpower in the government sector, causing more problems to water management. The incidents upset farmers in the area, who started to destroy irrigation structures and demand for more effective water management. The situation escalated into a social conflict.

The Yom River has no reservoir to supply water resulted in lacking of water for domestic use and agriculture, as well as causing flash flood. Water in the Yom River Basin had wildly fluctuated between flash flood in a rainy season and drought in a dry season. Local people were therefore affected from the non-secure water supply which leaded to repeated damage and poverty as appeared in Figure 4.

Figure 4: Flood and drought in the areas of Yom River Basin

Before implementing the initiative, the water could supply only 6,917 acres in a dry season. However, the needs of the dry-season farming had escalated to 36,364 acres which caused the following difficulties.

- Water shortages for the second crop season were common, especially from January to February.
- Farmers willingly broke an irrigation structure in order to let water flow into one's own plot.
- Water fights were emerged among water users, starting from head-end water users through tail-end water users.
- The relationships between farmers and public irrigation staff were intense due to frequent farmers' protests.
- There were no integrated drought relief measures from government officials. Farmers then helped themselves by blocking a water body to raise water level into their own plots.
- Income from farming was not enough to raise a family, thus provoking the rural poor.
- Farming was often damaged from drought.
- There was seasonal migration of farmers to gain income in a dry season. The family relationship was unhealthy because family members lived apart, thus leading to social problems.

The mentioned problems were mainly caused by farmer's poverty. Farmers needed to earn income for their families. The principle income of farmers came from farming and selling agricultural products. Water was therefore essential for farmers to maintain agricultural activities. Every farmer strived to get limited water for one's own benefits, thus boosting water conflicts among farmers and between farmers and public offices. Drought also drove farmers to seek jobs in a city during a dry season. The separated family tended to cause troubles among family members.

As a result, water shortages for the second crop season were common in the areas, especially from January to February. A series of crop failures were repeated, thus causing the inevitably rural poor. The water shortages ignited water fight among local farmers. Individual farmer either destroyed irrigation structures or pumped water for one's own benefits. Related public agencies did practice passive response to the problems. Lack of participation and communication among stakeholders further boosted the loss of faith in public governance.

People's Participation in Irrigation Management: The Key players

Having been repeatedly encountered water shortages for the second crop season in the areas, the Mae Yom O&M Office developed the initiative in 2005 to solve the problem. There were five key players contributed to the implementation of the initiative. Five key players included the director, staff of the Mae Yom O&M Office, farmers in the irrigation areas, Disaster Relief Committee at district and provincial levels, and LAOs.

The combined effort of these key players made this project successful as everybody played his or her role efficiently. The director of the Mae Yom O&M Office fully supported the initiative by determining it into one of the Office's missions and allocating a budget. Staff of the Mae Yom O&M Office introduced the initiative to prospective parties and coordinated with relevant agencies and farmers in order to reach a mutual agreement on policy, implementation plan, and working procedures of participatory water management. Farmers in the irrigation areas cooperatively identified water-taking rules and followed those rules whenever taking water. Farmers additionally served as committee members to tracking and auditing fuel and lubricant budgets for pumps. The Disaster Relief Committee at district and provincial levels were made up of representatives from relevant public agencies at the district and province. The chairman of the district and provincial Disaster Relief Committees were sheriff and governor, respectively. The Committee took part in specifying strategies for integrated drought prevention and mitigation plan and driving related public agencies to implement accordingly. The Committee, moreover, supported budgets to drive the integrated drought plan in the areas. The local administrative organizations acted as representatives of local people to coordinate with water user groups in order to supervise rotational water taking conforming to the mutual agreement.

Problems and solutions for implementing projects

While implementing this project, there were obstacles encountered during the initial stage in implementation strategy on PIM. However, those were met with the combined effort and integrity of every individual stakeholder.

First of all, the project irrigation staff resisted implementing PIM because they did not want to lose their sole power in water management decision-making. The RID arranged a series of training sessions to make the staff understand the PIM concepts and approaches in order to change the staff's attitude. The RID also identified a key performance indicator to monitor the PIM implementation.

Secondly, farmers did not understand the PIM concepts and refused to collaborate on PIM. The Kra Seaw Operation and Maintenance Project continuously provided seminars and training sessions for farmers including the PIM concepts, technical skills in irrigation, administrative skills, and organic farming. However, the key success was the sincerity, determination, and continuity of the staff of the Kra Seaw Operation and Maintenance Project who worked closely with farmers during the implementation period.

Thirdly, LAOs did not collaborate on allocating maintenance budgets of the transferred irrigation projects. The RID continually provided the regional workshops to make clear about the budget source and how to use the budgets.

Fourthly, the project irrigation staff lacked of public participation skills. They were therefore reluctant to incorporate PIM. The RID together with a non-government agency initiated a series of capacity development sessions to create the new spirit of public service among the RID's staff. The entire capacity development for the staff took three years. The first year training constituted two workshops. Each workshop, which lasted 5 days, was limited to 25 participants. The training was to introduce the concept and skills needed to be an effective facilitator of meaningful public participation activities. Only qualified participants moved on to the second year training. The second year training blended the best arts of finding oneself and living with others from western and oriental doctrines. It contained four consequent courses as follows: (1) Enneagram: nine basic personality types of human nature and their complex interrelationships; (2) tasks, power of groups and happiness; (3) leadership that stressed power of water user organizations; and, (4) restorative conflict resolution mechanisms in a public meeting with water user organizations.

Each course took about four days. The third year training focused on developing skills of being a facilitator. Each course was carefully designed for 30 participants from the second year training. The training comprised of four sequential courses: (1) beginning facilitator for PIM; (2) intermediate facilitator for PIM; (3) advanced facilitator for PIM; and, (4) relaxation and consciousness building that supported to generate management skills in a public meeting.

Each course took about four days. The capacity development efforts had been periodically revised on trial and error basis.

Lastly, the areas of implementation were large for which it was hard to complete PIM in a short period. The Office of Public Participatory Promotion, RID in collaboration with the Kra Seaw Operation and Maintenance Project clearly specified an implementation plan and evaluated it regularly. The RID's executives acknowledged the importance of PIM and continually allocated budgets for this purpose.

The Strategies used to implement the initiative

The Process: In order to prevent and mitigate drought in the irrigation areas of the Mae Yom O&M Office and to effectively manage water, two main strategies were used that is, (1) knowledge management and data dissemination; and, (2) three-coherent task mechanisms. The first strategy, knowledge management and data dissemination, constituted three steps as follows: (1) collecting data by the Mae Yom O&M Office gathered data on meteorology, hydrology, engineering, economy, social, and local wisdom to study the current situation, potential of dry-season cultivation, and factors that affected the cropping pattern, as well as applying the SWOT analysis in order to lessen water conflicts among tail-end users; (2) using information technologies including the Remote Sensing, Geographic Information System (GIS), and Global Positioning System (GPS) to analyze drought risk areas, to provide a geographical database, and to prepare maps of zoning water management; and, (3) transferring knowledge and data dissemination that the Mae Yom O&M Office disseminated the comprehensive water information, geographical database, and agreed rules via different means, for example, the National Broadcasting of Thailand / Phrae Province Branch, local radio stations, village loudspeakers, and farmer meetings. The publicized data made the local administrative organizations and water user groups understand the irrigation regulations and water saving campaign.

The second strategy, three-coherent task mechanisms, consisted of three tasks; (1) water subsidy for agriculture: the Phrae Province Disaster Relief Committee, the Mae Yom O&M Office, the Phrae Provincial Irrigation Office, and local administrative organizations cooperatively identified the water management and pumping control plans, as well as allocating budgets to supply either fuels or electricity for pumps at different locations; (2) participatory irrigation management: it was the cooperation between the Mae Yom O&M Office, district agricultural officers, local administrative organizations, and water user groups to determine a water management plan, to establish a temporary dike, to reach a mutual agreement, to arrange a rotational water delivery, to maintain irrigation canals, to locate a pumping station, and to mediate water conflicts in the areas; and, (3) acting upon agreement and supervision: it was the coordination between the Mae Yom O&M Office, district, local administrative organizations, and water user groups to supervise and audit water management, rotational water delivery, mutual agreement, fuel use and provision, and electricity cost for pumping, as well as adjusting the operation schedule according to the present situation.

The restoration of water user groups, from the common basic one to irrigation water management group, in order to unite farmers for management of the Mae Yom Operation and Maintenance Project, was still not enough to solve all the problems. As the Mae Yom project covered a vast area and needed water in larger volume than the supplied amount, the project had to apply knowledge management procedure by collecting water data, cultivation statistics, production price, as well as using geographic information technology such as the Small Multi-Mission Satellite (SMMS Satellite) Image Map, agricultural zoning, along with opinion gathering among public and involved government officials. This was to proceed on cultivation plan, water operation plan, assistance measures and integrating work among every involved agency, farmers, and all the stake holders, through the mechanism of Committee for Assistance to Disaster Victims, Phrae Province, under three-coherent task mechanisms as detailed in Figure 5:
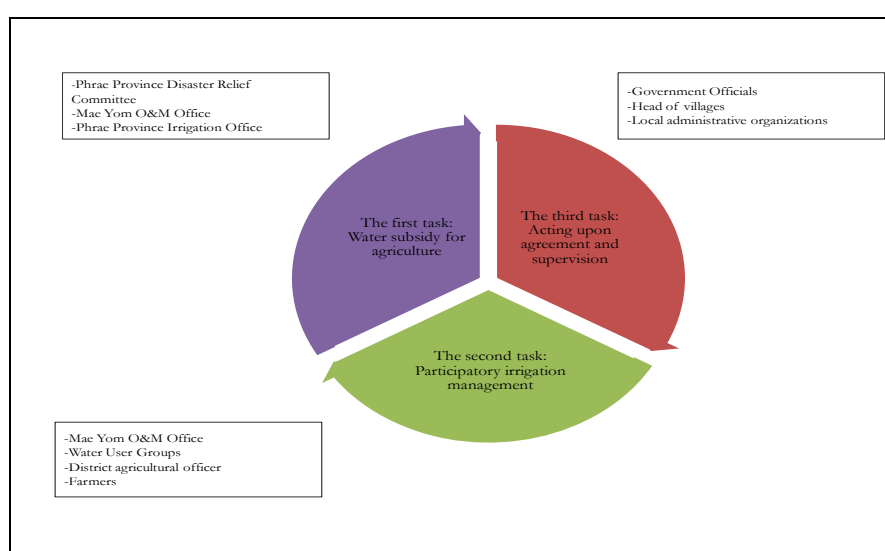
Figure 5: Relevant parties of the three-coherent task mechanisms

Strategy 1: Providing support on water for agriculture

The Committee for Assistance to Disaster Victims in Phrae Province provided budget for water supplying by using water management information from the Royal Irrigation Department to determine budget on electricity and petrol cost in water pumping. The Royal Irrigation Department provided water pumps, and the Provincial Agriculture Office provided fuel oil and promoted cultivation. The task involved different organizations with diverse roles as the followings.

The Royal Irrigation Department:

> ➢ Water management planning
> ➢ Establish a water-management coordination center
> ➢ Provide mobile pumps
> ➢ Coordinate with stakeholders

Local administrative organizations:

> ➢ Supervise the electrical pumping stations

The Phrae Province Disaster Relief Committee:

> ➢ Support budgets for fuel and electricity cost of pumping stations

Provincial agricultural officers:

> ➢ Procure fuel and govern budgets for pumping
> ➢ Promote suitable crops to farmers

Strategy 2: Participatory Irrigation Management

The farmers and water user groups made an agreement on when to set up a temporary dike in the river, install water pumps in the area, as well as maintain and clean the canals before irrigation operation, while the public agencies proceeded on water pumping as being agreed in the irrigation management plan. The relating agencies included:

The Royal Irrigation Department:

> ✓ Provide water information for making decisions
> ✓ Participate in water management planning
> ✓ Water administration as agreed upon
> ✓ District offices and local administrative organizations:
> ✓ Prepare a meeting venue
> ✓ Inform relating parties about a meeting and meeting resolutions
> ✓ Send an invitation letter for a meeting

Provincial and district agricultural officers:

> ✓ Arrange a meeting for water management in an area
> ✓ Mediate an agricultural conflict in an area
> ✓ Prepare a meeting report to the Phrae Province Disaster Relief Committee

Farmers and water user groups:

- ✓ Specify a date for establishing a temporary dike
- ✓ Jointly identify the rotational water delivery plan and regulations
- ✓ Install a pump in an area
- ✓ Help maintain ditches and canals before water delivery
- ✓ Be a committee member of related activities

Strategy 3 : Control and operation under the agreement.

The RID kept control of water management operation as planned, while Local Administration Organizations inspected the operation. The Provincial Agriculture Office controlled fuel oil consumption, while farmers took part in inspecting fuel consumption and water pump electricity cost as determined in the plan. Different roles of related agencies were:

The Royal Irrigation Department:

- ➢ Participate in water management control based on a mutual agreement
- ➢ Mediate a water conflict in an area with a district officer

District offices and local administrative organizations:

- ➢ Supervise water management in accordance with an agreement
- ➢ Mediate a conflict in an area

Provincial and district agricultural officers:

- ➢ Oversee the fuel use and electricity cost in conformity to an agreement
- ➢ Resolve a problem in a field operation

Farmers and water user groups:

- ➢ Act upon a common agreement
- ➢ Jointly check the use of fuel and electricity for pumping in compliance with planning
- ➢ Coordinate with government offices to investigate the rotational water delivery based on planning
- ➢ Help adjust a water management plan with relevant agencies according to the current situations

To promote transparency of the fuel use, each pump was designated by the specific number and responsible controller. Farmers and water user groups were able to monitor pumping hours of each single pump recorded at the pumping stations. The pumping hours were then calculated to be the amount of fuel use that had to be consistent with the amount of fuel left. The joint-monitoring done by farmers and water user groups successfully helped prevent the fuel corruption. The three-coherent task mechanisms have been implemented since 2005. At present, the mechanisms turn to be parts of routine jobs of relevant government agencies. The

Phrae Province Disaster Relief Committee, moreover, truly supports the mechanisms in order to provide water for dry-season agriculture and to ultimately achieve the well-being of farmers.

The results were an increase of farming areas, from 32,500 rai in 1993 to 92,000 rai in 2010, as well as rising income for farmers from 154 million baht to 533 million baht. The irrigation management became more efficient despite reduction of manpower (from 282 people in 2004 to only 161 people), saving the government spending on salaries for 18.6 million baht a year, and reducing conflicts between farmers and Irrigation officers, as well as conflicts among farmers themselves.

Benefits of the initiative

The initiative provided substantial benefits to different parties from an individual level to a global level. The benefits were detailed in the followings.

At an individual level:

1. Farmers:

There were 16,700 and 370 households of farmers who lived in inside and outside of the irrigation areas, respectively.

1.1 Farmers got involved in water management decision-making and crop planning with the Mae Yom O&M Office. The crop planning was based on water supply information provided by the RID.

1.2 Water was allocated in a fast, fair, and equitable manner.

1.3 Conflicts and complaints regarding water were minimal.

1.4 Dry-season agricultural areas were increased from 12,846 acres in 1993 (before the initiative) to 36,364 acres in 2010 (after the initiative) as shown in Figure 6.
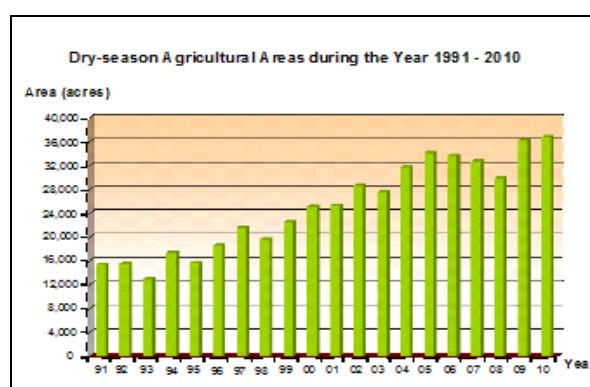
Figure 6: Dry-season agricultural areas at the Mae Yom O&M Office

1.5 Farmers had more income from US$5.1 million to US$18.4 million by selling agricultural products. Specifically, after implementing the initiative in 2005, farmers' income tended to continuously increase from US$13.6 million in 2005 to US$18.4 million in 2010 1.6 When farmers had more chances to do dry-season farming, the seasonal migration of local farmers considerably decreased.

1.6 The initiative helped resume the good relationships among farmers and between farmers and public irrigation staff.

1.7 Good attitude towards government agencies' missions had been developed among farmers.

1.8 Farmers expressed more service's satisfaction due to the 40-day quicker installation of pumps.

2. Local administrative organizations (LAOs):

2.1 The LAOs were capable of maintaining farmers' faith in their competence to function.

2.2 Local taxes collected by the LAOs and the GPP of an agricultural sector in the irrigation areas of the Mae Yom O&M Office tended to considerably increase after introducing the initiative in 2005.

2.3 Local people in an agricultural sector possessed more average household income from US$174 per month in 2002 (before the initiative) to US$317 per month in 2009 (after the initiative) according to the data from the National Statistical Office, Thailand. Thus, the quality of life of local people had been improved.

2.4 Minimized social conflicts in the areas.

3. Department of Agricultural Extension (DOAE):

3.1 The DOAE claimed that the drought prevention by the initiative, in turn, the increased income opportunity was estimated to be 24,901 acres or US$10.1 million in 2010.

3.2 The initiative established work collaboration among government agencies.

4. The Mae Yom O&M Office:

4.1 Although the manpower of the Mae Yom O&M Office had been continually decreased from 282 persons in 2004 to be 166 persons in 2011, the operation and maintenance service was more effective, thus saving staff salary of US$620,000 per year.

4.2 The initiative allowed farmers to take part in crop planning and water management decision-making. This helped instill a sense of ownership among farmers, thus taking a better of an irrigation system. A maintenance budget of the Office was noticeably decreased.

4.3 Conflicts between public irrigation staff and farmers were lessened.

At the national level:

The initiative led to ease water conflicts in Thai society. The increase of farmers' income assisted in alleviating the standard of living of farmers. This became an incentive to maintain agricultural careers of farmers, which accounted for 34% of the population, as well as conserving the irrigation areas of the country. The initiative facilitated more dry-season agricultural areas, thus enhancing food and energy security of the nation. The dry-season agricultural products were contributed to the national agricultural export, which served as one of the main composition of the GDP.

At the global level:

Since Thailand is one of the largest exporters of agricultural products, this initiative promoted the food security of the world. According to the latest FAOSTAT, major exported commodities of Thailand in 2009 included rice milled (6.9 million tons), cassava dried (4.4 million tons), sugar refined (2.7 million tons), sugar raw centrifugal (2.3 million tons), cassava starch (1.7 million tons), rubber natural dry (1.7 million tons), rice broken (1.5 million tons), maize (1.1 million tons), and natural rubber (1.0 million tons). In general, agricultural products in a dry season possess better product quality due to less plant pests. The initiative then helped provide more farming areas as well as qualified products for an agricultural sector that contributed to the Thai exports.

Technology of Irrigation Management Transfer

The initiative was introduced in 2005. It encouraged participation from every stakeholder including related public agencies. Two principal strategies, that is, knowledge management and data dissemination and three-coherent task mechanisms, were applied to implement the initiative. The Mae Yom O&M Office acknowledged the importance of research and development and knowledge management. The Office has conducted a number of researches in accordance with GIS and drought prevention. The researches, which aim to improve a work process of the initiative, are exemplified as follows: water development project and participatory irrigation management in drought problem-solving (2012 - 2013); application on SMMS to tracking dry-season agricultural areas: a case study of the Mae Yom O&M Office (2011); using GIS to evaluate drought risk areas: a case study of the Mae Yom O&M Office (2010); the relationship between soil and water at the Mae Yom O&M Office (2010); integrated flood and drought prevention and mitigation at the Mae Yom O&M Office (2008); and, a pilot project on database management of irrigation areas by using GIS and Orthophotos (2008). In 2008, the Office got the first place winner from knowledge management on integrated flood and drought prevention and mitigation held by the RID. The Office, moreover, won the award titled "RID Innovation" regarding public relations in 2010.

Meaningful participation among relevant parties was based on comprehensive and updated information in order to make a right decision. The Mae Yom O&M Office, acting as a core public agency regarding irrigated water, disseminated the comprehensive water information, geographical database, and agreed rules on water-taking via the following techniques. An engineer staff of the Office broadcast a radio program once a week at the National Broadcasting of Thailand / Phrae Province. Local radio stations and village loudspeakers were also effective to distribute the information to the main target group like farmers. Posters and board exhibition were conventional to provide information. Farmer meetings served as active forums to exchange problems and concerns between relevant parties.

The initiative was adopted and embedded by the Phrae Province Disaster Relief Committee into its working procedures in 2008. The annual implementation steps of the initiative were composed of five steps as the followings. Step 1) data collection and analysis for supporting decision-making (October-November): Assembling data on knowledge management, appropriate information technologies, and public opinions to analyze and then propose to the Committee and farmers to jointly making decisions on water management plan. Step 2) data utilization for planning and participatory irrigation management (December): Participatory meetings between relating public agencies and farmers were arranged to specify rotational water delivery and water-taking rules, as well as inquiring local wisdom to provide extra water supply. Step 3) converting plans into actions (December-March):The mentioned plans and meeting resolutions were informed to all stakeholders and acted upon accordingly. Step 4) plan monitoring and evaluation (December-March):The three-coherent task mechanisms were the key to tracking and promoting transparency of the initiative. Step 5) learning from the initiative (April-May): The arisen problems during water delivery were brought to a meeting to seek a mutual solution. When the second crop season completed, the After Action Review (AAR) was regularly held to conclude all lessons learned.

At present, the provincial offices recognize the initiative's accomplishment and promote to be the Best Practice in integrating drought prevention and mitigation. The initiative is then extended to other provinces to cope with drought in the areas through the function of their Disaster Relief Committee at district and provincial levels.

Another opportunity to extend the initiative lies in a similar irrigation project type like the Mae Yom O&M Office, that is, building a weir with no reservoir. There are 94 weir projects, Mae Tang Weir, Nam Fang Weir, and Mae Lao Weir, to name but a few, in five provinces out of fifteen provinces of the northern Thailand. It is estimated that the initiative can facilitate more dry-season agricultural areas of 9,000 acres in those five provinces or about 27,000 acres in fifteen provinces of the northern Thailand.

Conclusion

At present, water related problems in Thailand are getting escalated in both numbers and frequencies. The number of core public agencies that are responsible for water issues is seven agencies in three different ministries. One main cause of water problems is drawn on management of individual public agencies, on the one hand, and cooperation among relevant public agencies, on the other hand. The Mae Yom O&M Office had certainly engaged in the structural limitation of water related agencies. The repeated drought had been solved from time to time by each responsible agency. As well, water conflicts were mediated on a case by case basis without implementing a comprehensive measure against drought.

To seek a proactive drought relief measure, the Mae Yom O&M Office embraced the lessons learned, local wisdom, and problems solved on a trial and error basis. Appropriate geographic information technologies were also applied to updating and tracking the drought risk areas and dry-season agricultural areas. This has been required perseverance, determination, and continuity from the Office who created the initiative that helped resolve the seemingly unsolved drought in the areas. A better quality of life of farmers has been considered as the greatest gift to the Mae Yom O&M Office and urges us to maintain the integration between public sectors and civil society that sustains quality of services.

Acknowledgment

REFERENCES

Clyma, W. (1986). *Irrigated agriculture: a comparative analysis of development concepts*. In: K.C Nobe and R.K. Sampath (Eds.). Irrigation Management in Developing Countries: Current Issues and Approaches. Studies in Water Policy and Management. No.8, London :Westview Press.

FAO [Food and Agriculture Organization of the United Nations]. (2007). *Irrigation Management Transfer: Worldwide efforts and results*, Rome: FAO.

Groenfeldt, David. (2003). Background paper on Participatory Irrigation Management Circulated at the World Water Forum III.

Johnson III, S. H, M. Svendsen and F. Gonzalez. (2002). *Options for institutional reform in the irrigation sector*. Discussion paper for the international seminar on participatory irrigation management 21-27, April 2002, Beijing.

Korten, F. (1984). *The learning process approach to rural development*. Manila: Kumarian Press.

Kumnerdpet, Wachiraporn.(2011). "Challenging Institutional Frameworks of Governance: Learning from Participatory Irrigation Management in Thailand." In The Scale of Globalization.Think Globally, Act Locally, Change Individually in the 21st Century, p.174-185. Ostrava: University of Ostrava, 2011.
http://conference.osu.eu/globalization/publ2011/174-185_Kumnerdpet.pdf

Meinzen-Dick, et al. (2002). What affects organization and collective action for managing sources? : Evidence from canal irrigation systems in India. *World Development*, Vol. 30 (4): 649-666.

Pasandaran, Effendi. (1991). *Irrigation in Indonesia: Strategy and Development*. LP3ES, Jakarta.

Rattanatangtrakul, Urit. (2006). *Participatory Irrigation Management (PIM) in Thailand*, Bangkok :Royal Irrigation Department.
http://www.rid.go.th/thaicid/_5_article/2549/07PIM.pdf

Royal Irrigation Department, Thailand, (2005). *A record of irrigation in Thailand*. Bangkok: Royal Irrigation Department.

The Mae Yom Operation and Maintenance Office. (2012). *A summary report of the initiative Integrated Drought Prevention and Mitigation,* the Mae Yom Operation and Maintenance Office Phrae Province, Thailand.

United Nations. (2012). *Integrated Drought Prevention and Mitigation*: The Mae Yom Operation and Maintenance Office Phrae Province, Thailand.
http://unpan1.un.org/intradoc/groups/public/documents/un-dpadm/unpan049667.pdf

Uphoff, N. (1986). *Getting the process right: improving irrigation management with farmers' organization and participation*. Working paper, New York: Cornell University.

Vermillion, D. and Sagardoy, J. (1999). *Transfer of Irrigation Management Services*. FAO Irrigation and Drainage Paper 58.

Appendices

Appendix 1: Work Concept of the Initiative
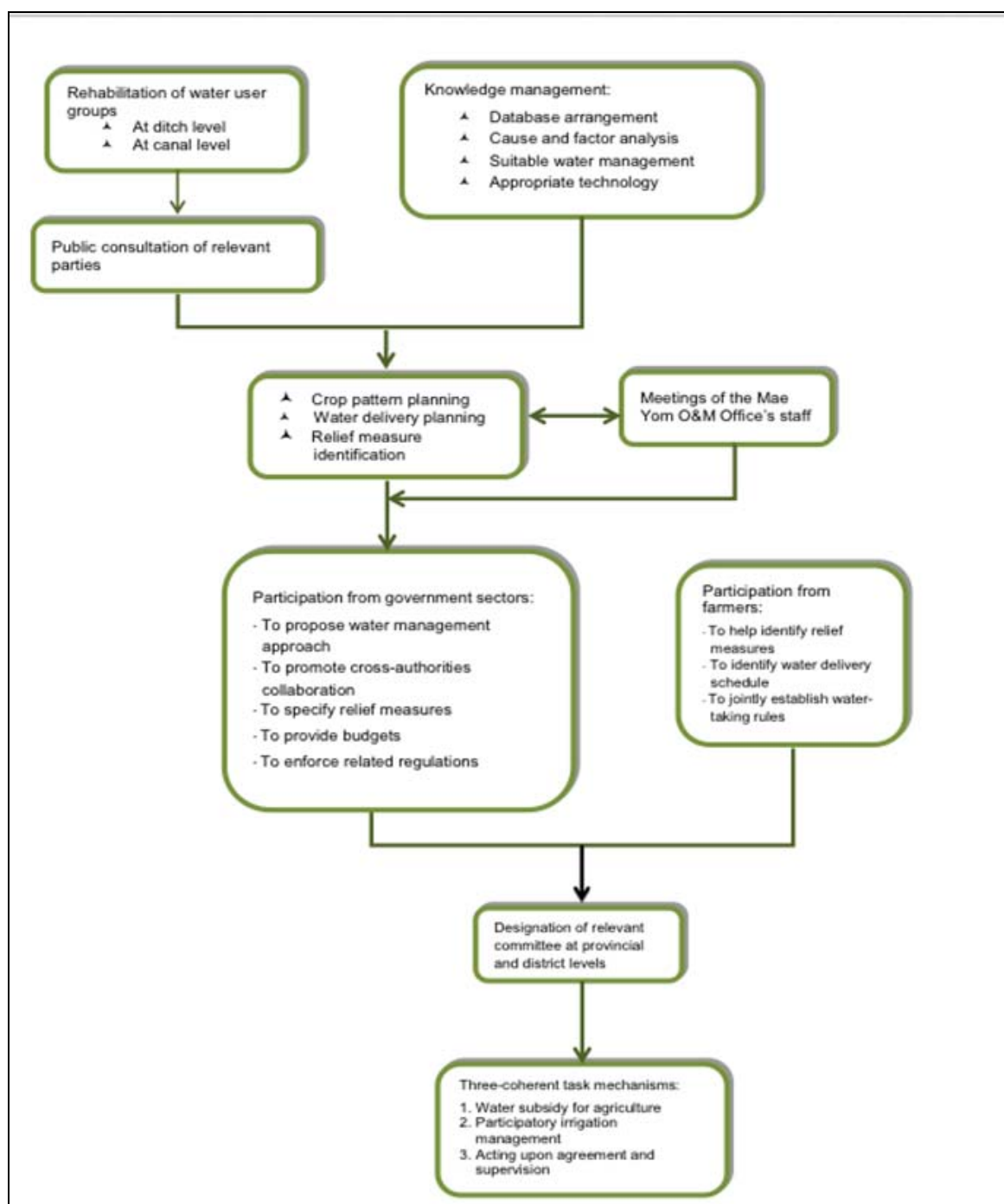
Source: The Mae Yom Operation and Maintenance Office

Appendix 2: Work process of the initiative
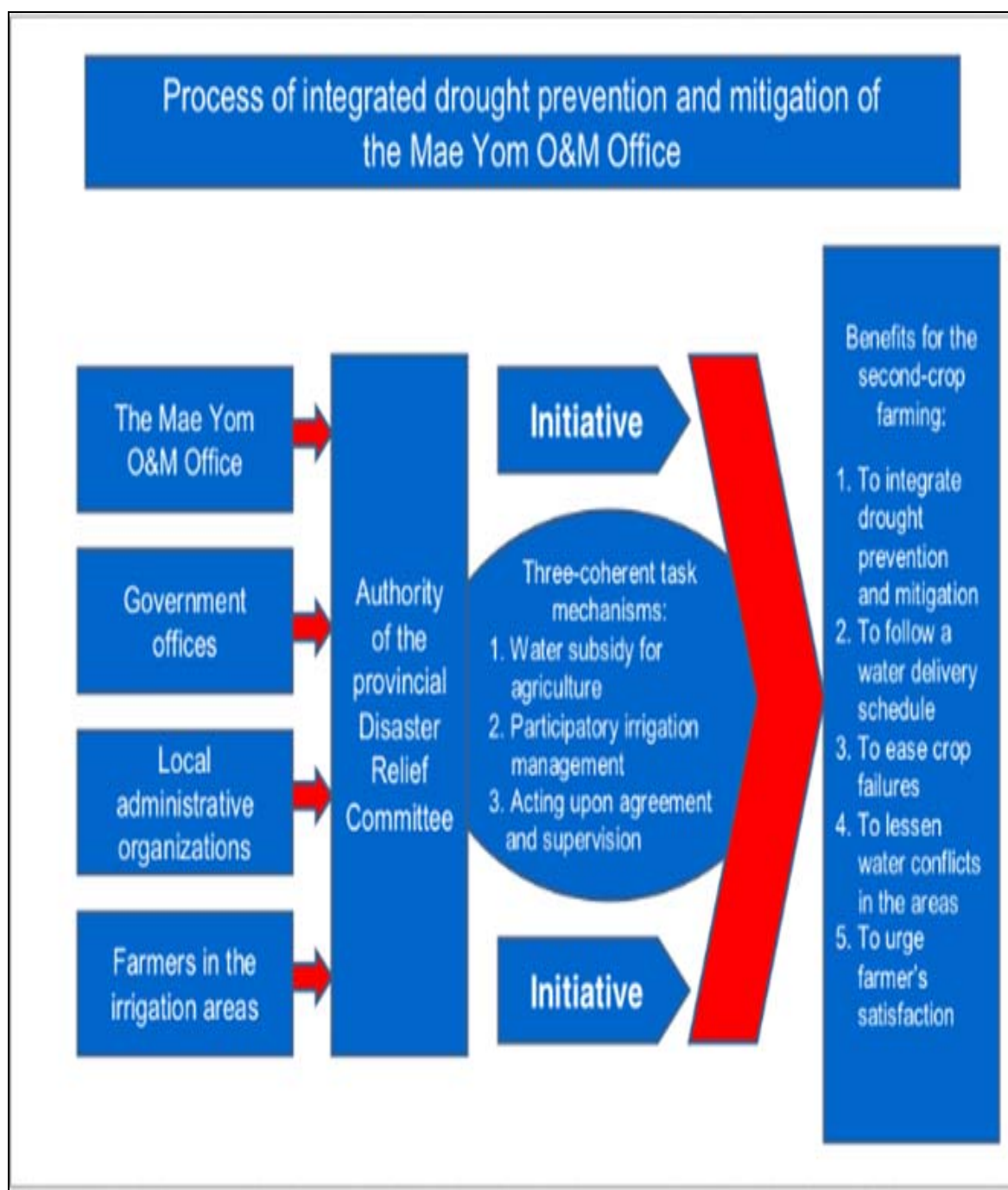
Source: The Mae Yom Operation and Maintenance Office

Discursive Strategies Used in Thai Daily Newspapers:
A Case of the Government's Water Management News

Suhada Heembenson[1]

Abstract

Drawing upon critical discourse analysis, this study investigates the discursive strategies used by Thai daily newspapers to present news about the government's water management. The purpose is to identify discursive strategies employed in the presentation of the government's endeavor to manage the water crisis in 2011 and to investigate the functions of these strategies in constructing the public's image of the government. In all, 30 pieces of the government's water management news are gathered from the 3 Thai daily newspapers, *Thairath*, *Daily News* and *Khaosod* from November 2011 to February 2012.

The present study is conducted on two levels. At the macro level, it adopts Fairclough's Critical Discourse Analysis (CDA) framework to reveal the dialectical relationship between the discourse of the news and society. At the micro level, the text is analyzed by using approaches in Systematic Functional Linguistics (SFL) to identify discursive strategies employed. The finding indicates that 10 discursive strategies are used, namely 1) naming, 2) transitivity, 3) impersonalization, 4) exclusion, 5) assimilation, 6) metaphor, 7) choice of backgrounding action, 8) verb creating government's credibility, 9) negative lexicalization and 10) choice of representing others voice. These strategies have different communicative functions to help text producers achieve their aims in influencing and shaping audiences' perceptions regarding the government's water management scheme.

Key words: Discourses, Critical Discourse Analysis, Thai Daily Newspapers, Government's
Water Management News

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Introduction

At present, the world is experiencing an environmental transformation, as seen in the phenomena of global warming and climate change. Climate change ultimately produces increases in rainfall volume, stream flow and sea level. These changes will certainly lead to more flooding (START, 2011). Thailand is one such country experiencing this phenomenon. From August through December 2011, a change in climate arising from global warming, together with a typical monsoon season, such as tropical storm *Haima, Nock-Ten*, *Haitang*, *Nesat* and *Nagae* caused abnormal falls of rains in many areas. The prevalence of these tropical storms then accelerated the severity of the rainfalls which brought an inundation across the Northern, Northeastern and Central portions of Thailand (Ministry of Natural Resources and Environment, Pollution Control Department, 2012). In addition to the heavy rainfall, the water management of the current government was one of the factors causing the 2011 inundation (Ziegler et al., 2012). Similarly, according to Apiprachyasakul (2012), from January to October 2011, rainfall in the Northern and Northeastern provinces and provinces located in the Chao Phraya river basin did not bring on the 2011 Thailand flooding crisis rather, it was the government's inability in water management caused this crisis (Apiprachyasakul, 2012). This severe disaster was reported continuously through the mass media, including newspapers. Thus, during this time, newspaper reporting has played an essential role as it could be a medium of communication between the government and the people in order to deal with the problems caused by the flooding. Nonetheless, the newspaper coverage may not be based only on facts but also on journalism's perspectives (Bennett, 2007). That is, in some cases, the press turned vehemently critical, highlighting personal scandals and focusing on biased attraction and politicians' failures. Therefore, the people's perceptions of the flooding issue are not only shaped by their direct experience and the impressions received from other individuals but aslo by the newspapers.

Accordingly, the investigation of newspapers' discursive strategies is challenged as readers may not know whether their minds and perceptions are manipulated by linguistic patterns or whether people who will be interviewed, quoted or described in the news reported are systematically organized. In this context, the issue of water management under the Yingluck government is worth exploring, especially, concerning the flooding disaster in 2011. Specifically, this study will examine headline, subhead and body of the news in order to find out the strategies employed discursively to manipulate people's perceptions and investigate the functions these strategies serve in such communicative event. The study will pursue the following two major research questions:

1) What are the discursive strategies used in the presentation of the news of the government's water management?
2) What functions do the strategies serve in such communicative event?

Theoretical Framework

This study focuses on newspaper's use of language. It employs the critical discourse analysis framework to investigate the dialectical relationship between discourse and society. Taking a hypothesis of Critical Discourse Analysis as its point of departure, the research argues that discourse has the potential to assign meaning to social entity. With this argument, the study proposes that the analysis of newspaper discourse has the potential to construct the identity of the government.

Discourse Analysis and Critical Discourse Analysis are new perspective of language study. They aim to investigate the function of actual language use in social context. The goal of the two approaches is not only to have insight in the system of language. Rather they aspire to explain the "dialectical" relationship between language and society. With this objective in mind, the two see discourse as one of social practices. This section will give an introduction to the rationale of these approaches which form the basis of this research project.

Discourse is a term which has been widely defined. Discourse is the language above a sentence or anything above the sentence (Cook, 2004). Discourse is "language above the sentence or clause, language use or a wider range of social practice dealing with language and/or communication" (Schiffrin et al., 2001). Moreover, discourse can be a constitution of all dimensions of social structure which directly or indirectly shapes and constrains its own norms and convention as well as the relations, identities and institutions which lie behind them (Fairclough, 1995). Thus, discourse is defined as a multidimensional social phenomenon. In this study, the term discourse refers to the spoken and written language through which a newspaper presents the government's water management news. Specifically, this study is premised on the assumption that the language used in newspapers reflects asymmetrical power in controlling people's perceptions. That is to say, the existence of newspaper power is mainly concerned with discourse domination by elite groups or institutions through exercising the power of language which basically not only has the potential to control people's minds, but indirectly their actions (van Dijk, 2008). Following van Dijk's understanding (2008), power is a property of relations between social groups, intuitions or organizations. Hence, it deals with social power not individual power. As noted by Hardy & Phillips (2002), power is not something connected to individuals or groups, but represents a complex web of relations determined by systems of knowledge constituted in discourse. More precisely, the control is exercised by one group or institution (or its members) over the actions and/or the minds of (the members of) another group, thus the freedom of others' actions is limited (van Dijk, 2008). In order to better understand how newspapers constitute the power of language and control people's minds, the study relies on the hypothesis that discourse is socio-culturally constituted and constitutive.

Discourse is shaped and constrained by social structure (Fairclough, 1992). What individuals have said, heard, seen, written, expressed, exchanged or created is based on their knowledge, value, and beliefs which are shaped by social activities. Johnstone (2008) states that discourse can be an abstract system of rules or structural relationships, such as what words should be written; what behaviors should be acted upon or what feelings should be expressed. As a result, discourse is used to constitute ways of talking, thinking, writing and expressing in social activities. Thus, discourse is a set of expressions of abstract knowledge that is socially constituted. In other words, society constructs discourse. At the same time, this type of knowledge gets produced, reproduced and transformed through social activities. That is, for instance, ways of talking or thinking which are constituted can then constitute ideologies (a set of interrelated ideas or a system of belief), norms and conventions which serve to manipulate power in society. As a result, discourse is socially constitutive. In other words, discourse constructs society.

Therefore, in order to understand the power of discourse in shaping public perception about the government's water management, this study employs Fairclough's Critical Discourse Analysis (CDA) and employs his three interrelated components: text, discursive practice and social practice.
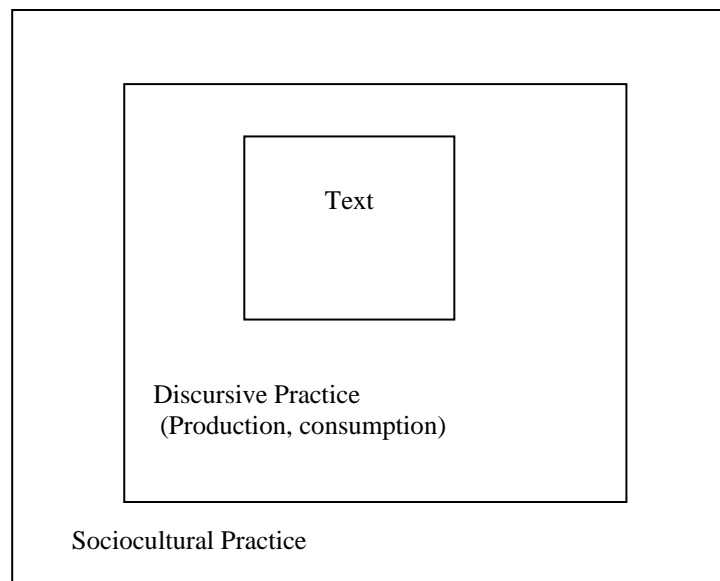
Fairclough's three dimensional model for critical discourse analysis

Based on the model mentioned, the study begins with the analysis of the sociocultural practice of the news about the government's water management. Sociocultural practice refers to a social or cultural context in which the event is embedded. The sociocultural practice is analyzed by examining the wide context of water management in Thailand since this dimension can be a condition which leads the way to produce the government's water management text and the interpretation of that text. Then, the study moves to discursive practice by analyzing the production of the three Thai newspaper texts and the consumption

of these texts by the Thai readers. At the level of text, the author investigates news texts from the three Thai daily newspapers by selecting only the issues dealing with the government's water management news. It analyzes the way in which the reported news presents the event (water management issue) and the social relations, as well as the ways they construct particular versions of reality, social identities and social relations. Therefore, the following selections will be analyzed in this study:

1) Interactional control (Fairclough, 1992: 152) - the relationship between speakers, including the question of who sets the conversation agenda;

2) Ethos (Fairclough, 1992: 166) - how identities are constructed through language and aspects of the text body;

3) Lexical choices (Fairclough, 1992: 190) - how words are used to describe and explain people's behaviors, emotions and feelings. For instance, the use of positive or negative nouns, verbs and adjectives;

4) Grammar (Fairclough, 1992: 152) - how events and processes are connected or not connected with the subjects and object; for instance, the use of the active and passive voice.

In addition, before analyzing the texts, the researcher will first transliterate the data as transliteration will maintain the particular Thai language features of the news discourse, such as the use of specific figures of speech. Then, the text will be translated into English.

Research Methodology

1) Data Collection

The study analyzes newspaper coverage of the government's water management of the 2011 inundation. Data to be analyzed were collected from the three Thai popular daily newspapers including: *Thairath*, *Daily News* and *Khaosod* from November 2011 to February 2012. There were 30 pieces of newspaper texts related to the government's water management news.

2) Data Analysis

The analysis employs Fairclough's CDA by dividing it into two levels: macro and micro levels. The macro level investigates sociocultural practice and discursive practice of the discourse on the government's water management news. Meanwhile, the micro level analyzes texts as the texts will evidence discursive strategies employed in this news. At this level, the author uses Systematic Functional Linguistics (SFL), one direction of textual analysis, to analyze the discursive strategies which result in the discursive functions of such strategies i.e. what does such strategy do in a specific communicative context. In this regard, the study combines various approaches evolving around the concept of discursive strategies For example:

Transitivity

Transitivity describes the verbal structure of the sentence. It broadly refers to who does what to whom and how. It helps reveal who plays an important role in a particular clause (agent/participant) and who receives the consequence of the action (affected/patient). When analyzing the agency (who does what to whom) and the action (what gets done), the following two aspects of meaning should be taken into consideration:

- Participants consist of both the "agent" of the process as well as the "affected" who are at the receiving end of the action; participant might be people, things or abstract concepts

- Processes are represented by verbs and verbal group, such as material processes (processes of doing, such as arrest, kill and attack), mental processes (processes of sensing, such as understand, like, and see) and verbal processes (expressions through the use of verb "to say" and its many synonyms, such as explain, suggest, advise, reveal and tell).

Lexis

Lexis refers to the word used. Choice is manifested in the language of the news in terms of the vocabulary used to present stories in the media. Each newspaper has a numerous choice of words and combinations of words which might be used in order to present a story to its audiences. In order to begin to access how vocabulary may illustrate a set of priorities in the news, one needs to be aware of the difference between denotation and connotation. A literal meaning of a word is called denotation while connotation is the set of expectations and associations which are attached to a word over time within a particular culture, and it may be positive or negative (Conboy, 2007).

Metaphor

Metaphor means the description of one phenomenon in terms of another. That is, when a speaker utters or writes metaphorically, it means what s/he means differs from what s/he says or writes. A clear understanding of metaphor can be grasped from an examination of the following *Guardian* newspaper example: "SPURS GO TO WAR OVER ARNESSEN". This headline does not mean that the football club is literally going to war, but rather they are performing in a manner that is as hostile as if they were (Conboy, 2007).

Naming

Naming is a perspective of language surrounded with social rules. In most cultures, it is possible to cause offence by adopting the wrong naming strategy toward people. The naming forms vary. For example, first name only (e.g. Elizabeth, Robert); short form of the first name only (e.g. Liz, Rob); first name + last name (e.g. Elizabeth Smart); title + first name (e.g. Ms, Mrs, Miss Elizabeth, Mr. Robert). In addition, these forms of naming also depend on context (classroom, job interview, ritual, ceremony, informal chat and trade) and relationship (formal, informal, friends, relations, strangers, superiors and inferiors). Therefore, naming, context and relationship operate together to create a complex series of meanings and very specific effects in newspaper discourse (Reah, 2002).

Position of action

In order to find out the position of the action in the news coverage, Reah (2002) suggests looking at the structure of the clause by means of a useful analytical tool--*theme.* Theme refers to the way in which the relative essential of the subject matter is mentioned. That is to say, the first main construction of a sentence is the theme of the sentence. Although there is the grammatical subject, there is no necessary relationship between the theme and the grammatical component in the aspects of the theme. The following example illustrates this pattern: *"One Friday night I go to the market"*. Here, the theme of this sentence is focused on time *"One Friday night"* and "I go to the market" is placed in a subordinate position (Reah, 2002).

Representation of social actors

The social actors can be represented through exclusion-inclusion (representations include or exclude actors to suit the interest and purposes in relation to the readers), genericization and specification (social actors can be represented as classes, or as specific, identifiable individuals), assimilation (social actors can be referred to as groups, such as *"Australians tend to be skeptical about admitting "Muslims""*), nomination (social actors can be identified by name, such as the use of proper noun (Harris) for formal, semiformal (Jack Harrisor) and informal (Jack), impersonalization (social actor can be represented by abstract nouns or by concrete nouns whose meanings do not include the semantic feature "human")) (Van Leeuwan, 2008).

Representation of other voices

The choice of incorporating and representing other voices refers to the incorporation of bits and pieces of other discourse, other styles and other voices (Johnstone, 2008). In other words, this choice involves the reference of others' speeches, such as the use of reported speech.

Research Findings

In order to complete the CDA framework and thereby explain the newspaper discourse usage in constructing PM Yingluck's government identity, this research analysis is divided into two levels: the macro level and the micro level. At the macro level, the sociocultural practice of the news on the government's water management is analyzed as this dimension could be a condition which leads to the way the three Thai daily newspapers produce the government's water management text and the interpretation of that text by Thai readers. Then, the analysis moves to discursive practice concerned with the production and consumption of the newspaper text. At the micro level, the analysis examines the text which is presented in the three Thai popular daily newspapers.

Macro Level

Sociocultural Practice

Thailand has a tropical savanna climate and basically three seasons: the rainy season (May-October), the dry season (November-April) and the winter season (mid-October and mid-February). Regional differences across Thailand can be given according to current differences in rainfall: from dry and highly seasonal conditions in Northeast, Northern and Central Thailand to the less strongly seasonal moist tropics of the southern peninsula. During the winter season, the Northeast brings cool and dry air across Northern and Northeastern sections of the country (Aon Benfield, 2012). Because of these seasons, Thailand has been inextricably subjected to floods and droughts. When rainfalls are unusual in timing or severity, the excess water becomes a flood. But, when there is not enough rainfall, a drought will arise. Hence, water management in Thailand is very significant as it can reduce the effects of both an inundation and a drought.

Initially, Thailand's water management involved the Royal-initiated projects; for instance, Monkey's Cheek *(Kaem-Ling)*, Artificial Rainmaking *(Fon-Luang)*, the Pa Sak Chonlasit Dam project and Khlong Lat Pho Floodgate project. The majority of these projects were set underway through the initiative of His Majesty the King and the Royal Irrigation Department (RID) (Apiprachyasakul, 2012). The involvement of the national or provincial governments, the business sector or even the industrial zone did not seem to be included. That is, until 2011, this year was a very remarkable one in Thailand as the country endured enormous devastation in the wake of the worst flooding in at least five decades. The main Thailand floods of 2011, which took place between late July and early December, first became widespread in Northern parts of the country as a result of the start of the typical monsoon season. However, the arrival of the leftovers of Tropical Storm Nock-ten in late July accelerated the severity of the rainfall (and floods) across the Northern, Northeastern and Central portions of Thailand (At the Mercy of Our Politicians, 2011).

Prime Minister Yingluck Shinawatra, who had meantime taken office, had to tackle this disaster. As mentioned earlier, Ms. Yingluck Shinawatra, Thailand's first female prime minister, has never before participated in the political realm, and is accused of being the clone or nominee of her brother, former premier Thaksin Shinawatra. She was sworn into office in early August, 2011. Consequently, the 2011 flood crisis was her first major test to prove her ability to manage this national disaster as well as dismiss the allegations of being her brother's puppet (Dam, Water Management Designed for Older Era, 2011). In handling this flood situation, the premier had set up the Flood Relief Operation Center (FROC) intended to deliver aid and to coordinate water management with other agencies, including the Royal Irrigation Department (RID) and the Bangkok Metropolitan Administration.

However, FROC's water management seems to have been inefficient as it could not respond to the situation. Hence, the public began turning to the mass media, such as television, radio and newspaper to cope with this crisis. An additional factor worthy of mention is that the premier Yingluck Shinawatra, in charge of the central government comes

from Phue Thai party while MR Sukhumbhand Paribatra, the governor of Bangkok, comes from the opposition Democract party. Ultimately this party difference meant that the floods were no longer just a natural disaster issue. Rather, they became the focus of a ferocious political game between the government and the opposition on water management, raising the question of whether the floods were due to a natural cause or to water mismanagement. If it had been the latter, the question needing to be answered was who took responsibility for this tragedy. In this regard, this questioning was worthy of being presented through the mass media, including the newspapers.

Discursive Practice

For the discursive practice of the three Thai daily newspapers, the study found that the three Thai daily newspapers are likely to present their news by giving voice of elite people. The voices of elite people here mean the voices from the prime minister, government agencies and member of government wing. The study found that journalists select to present the voices from government agencies and members of the government wing as these people are responsible for resolving the problem of flooding and have power to tell a story to the public. However, the voices that are opted out in most cases are that of people who suffer from the flood. Also, newspapers choose to present this news continuously. The presentation of news about the flood reflects the criteria of news value which is deemed most important to the three daily newspapers. The criteria of news value here is the threshold where the greater the impact and the more likely it is to be selected. In addition, when analyzing the overall news contents, the study found that the three newspapers presented the government's water management news in the same light. That is, the newspapers are likely to present the government's side, namely the opinions of the premier and water management experts who are responsible for tackling the water crisis without presenting voices from general public or flooding victim. Text producers also provide background information and tell current position of the persons whom they mention. For the news content, text producers present about how the government manages water and how to handle inundation the next time. Note that the current flood was not mentioned much in the news. Though the news about the government preventive plan creates the image of the government as being proactive, it distracts the people of the flood disaster that they currently face. This kind of presentation can be interpreted as the government attempt to cover up their current inability to solve the immediate problem.

Micro Level

Text Analysis

30 samples of in-depth analysis are presented. The examples are classified according to approaches evolving around the concept of discursive strategies. After the analysis was conducted, the findings show that 10 strategies are employed in the presentation of the government's water management news. They are 1) naming, 2) transitivity, 3) impersonalization, 4) negative lexicalization, 5) exclusion, 6) metaphor, 7) assimilation, 8) choice of representing other voices, 9) choice of backgrounding action and 10) verb creating government's credibility.

Table 1 illustrates the discursive strategies found in the presentation of the government's water management news.

Table 1: Discursive Strategies Found in the Presentation of the Government's Water Management news

Discursive strategies	Transliteration	Translation	Original Version
1. Naming	*Crab* guaranteed plan management water	*Phu* guaranteed a water management plan.	ปูการันตีแผนการจัดการน้ำ (เดลินิวส์ 30/01/55:)
2. Transitivity	Prime minister *crab reveal* plan take hand form sustain	Prime minister *Phu revealed* a plan to tackle sustainably.	นายกฯปู เผยแผนรับมือ-แบบยั่งยืน (ไทยรัฐ 22/01/55)
3. Impersonalization	*Bangkok wade* plan protect water form integration	*Bangkok forged ahead* with a plan for integrative flood prevention.	กทม. ลุยแผนป้องกันน้ำแบบบูรณาการ (ไทยรัฐ 12/12/54)
4. Negative lexicalization	Senator compressed FROC administration plan water *bad*	Senator condemned FROC for *insufficient* water plan management	ส.ว. อัดศปภ. บริหารแผนน้ำ ห่วย (เดลินิวส์ 22/11/54)
5. Exclusion	Drive move plan administrate water flood	A water management plan was expedited.	ขับเคลื่อนแผนบริหารน้ำท่วม
6. Metaphor	*Slash* plan bad agency muddle	The plan was *denounced* as *inefficient*, and the agency was denounced as *disorderly*.	ฉะแผนห่วยหน่วยงานมั่ว (เดลินิวส์ 4/11/2554)
7. Assimilation	*Government* enumerate plan mother chapter administrate manage water pass TV Pool	*Government* explained a master plan for water management on TV Pool.	รัฐบาล แจงแผนแม่บทบริหารจัดการน้ำผ่านทีวีพูล (ไทยรัฐ 22/01/55)

Table 2: (Continued)

Discursive Strategies	Transliteration	Translation	Original Version
8. Choice of representing other voices	*Electricity Generating Authority of Thailand (EGAT) request* confirmed that administration manage water has operation carefully by faculty subcommittee and faculty do work that involve	*Electricity Generating Authority of Thailand (EGAT)* confirmed that water management was operated carefully by the subcommittee and working group concerned.	*กฟผ.* ขอยืนยันว่าการบริหารจัดการน้ำมีการดำเนินการอย่างรอบคอบ โดยคณะอนุกรรมการฯ และคณะทำงานฯที่เกี่ยวข้อง (เดลินิวส์ 28/01/55)
9. Choice of backgrounding action	*When time 10.30, date 7 Feb, at Government House*, Ms. Yingluck Shinawatra, the prime minister give interview after be subject meeting cabinet that at meeting committee give consent plan walk late down area for follow plan management water (Tour Parrot) in during date 13-17 Feb already	*1.30pm, on Feb 7, at Government House*, the premier Ms. Yingluck Shinawatra was interviewed after presiding at a cabinet meeting. The cabinet agreed upon a field trip to keep track of the government's water management plan (Flood Tour) from Feb 13-17.	*เมื่อเวลา 13.30 น. วันที่ 7 ก.พ. ที่ทำเนียบรัฐบาล* น.ส. ยิ่งลักษณ์ ชินวัตร นายกรัฐมนตรีให้สัมภาษณ์ภายหลังเป็นประธานการประชุม ครม. ว่าที่ประชุม ครม. ให้ความเห็นชอบแผนการเดินสายลงพื้นที่เพื่อติดตามแผนบริหารจัดการน้ำ (ทัวร์นกแก้ว) ในระหว่างวันที่ 13-17 ก.พ. แล้ว (เดลินิวส์ 08/02/55)

Table 2: (Continued)

Discursive strategies	Transliteration	Translation	Original Version
10. Verb creating the government's credibility	"Kittiratt" *emphasize* mother chapter management water near finish *guaranteed* year next water no flood area economy	"Kittiratt" *stressed* that a master plan for water management was nearly complete and guaranteed that next year the economic zones will not be inundated.	"กิตติรัตน์" ย้ำแผนแม่บทบริหารจัดการน้ำใกล้เสร็จ การันตีปีหน้าน้ำไม่ท่วมพื้นที่ ศก. (เดลินิวส์ 12/12/11)

Each discursive strategy noted in Table 1 will be explained as follows:

1) In naming, generally, calling a person's nickname is likely to use in an informal situation. However, this context is considered as a formal situation. As a result, presenting only nickname of Ms. Yingluck is the way to construct her image as an individual, not as the PM of the country. More importantly, choosing to call her by her nickname instead of by her first name shows that the author is restraining from giving her due respect since calling someone by a nickname is the practice that people use with equals.

2) In transitivity, the text producer uses the verbal verb (a process of saying) "reveal" in order to convey his/her message to the receiver. The authors utilize verbal process to portray the way in which the government makes an effort in managing water. This process can appeal the audience's perception to connect the political beliefs and possibility in managing water.

3) In impersonalization, Bangkok is not used to refer to a particular province, but to the people who are prototypically associated with that division. By impersonalizing Bangkok, the author is able to conceal who the actors are. This allows the agents behind the events to be suppressed as it is not clear who is presented as responsible.

4) In negative lexicalization, words always convey feelings and emotions. They can also highlight the significance of the message and arouse emotion. Here, the word *"insufficient"* can degenerate the government's water management plan in the eyes of the majority of the public.

5) In exclusion, the author excludes the actor as she/he assumes that readers themselves can already know who is referred to from the context of the story. Generally speaking, in Thai society, the public have a common concept of the Thai government which consists of the two main power parties: the Democrat party and the Pheu Thai party. At present, public knows who governs the country (Pheu Thai party), and who is the opposition party (Democrat party). Therefore, in this sentence *"A water management plan was*

expedited.", although the actor is omitted, the reader can know which parties are being talked about.

6) In metaphor, the author uses a metaphor as it enables her/him to exaggerate for the sake of emphasis. The author uses the verb *"denounce"* to convey a physical action. Though there is no a physical battle, this word gives a sense of a verbal battle.

7) In assimilation, social actors can also be referred to as groups (assimilation). The word *"government"* is simply a collectivized group. That is to say, the newspaper does not give personal details of the participants classified as the *"government"* as such details could humanize them.

8) In choice of representing other voices, the author deploys the use of the *"Electricity Generating Authority of Thailand (EGAT)"* in order to confirm that the government's work was being operated carefully. This way can enhance the public's confidence in government's policy used in water management.

9) In choice of backgrounding action, the author focuses on prepositional phrases. The focus on place, time and date are represented as the theme of the sentence (see item 8). The author foregrounds these prepositional phrases in order to background the actions of the actor (Ms. Yingluck Shinawatra). The text producer pushes the actors to the back of the sentences into the subordinate position behind the prepositional phrases. This is one grammatical strategy for backgrounding the actions of the actors and foregrounding the location of place, time and date. Therefore, using the choice of backgrounding action of the actor can allow the text producers to give the texts a superior or inferior status of information given to readers.

10) In verb creating the government's credibility, verbs which are used together with the main actor and theme have played an important role in strengthening the credibility for the audiences. Here, the use of the verbs "emphasize" and "guarantee" can make the public feel credibility toward what the government have done since these word presuppose the existence of a plan.

In addition, each strategy serves specific functions which can be beneficial in the context of the government's water management news. That is to say, the total function of these strategies can construct a most effective way for the government's water management news. For example, to avoid mentioning the actor, the text producer uses impersonalization and assimilation as these strategies can conceal the actor. Based on the texts appearing in the government's water management news, 8 communicative functions can serve text producers' aims as follows:

1. To conceal actors, the text producers employ impersonalization and assimilation.
2. To show authors' attitudes toward persons, the text producers employ naming.
3. To create and support a government's credibility, the text producers employ verbs creating credibility and other voices.
4. To convey physical action, the text producers employ metaphor.
5. To manipulate readers' perception on the action of actors, the text producers employ transitivity highlighting the government's action.
6. To omit the actor as it is assumed readers already know the context, the text producers employ exclusion.

     7. To background action, the text producers employ the choice of backgrounding action.

     8. To highlight the malpractice of the government, the text producers employ negative lexicalization.

Discussion

To disclose what discursive strategies are used and what function are served in such communicative event, it is necessary to see the relationship among sociocultural practice, discursive practice and text according to Critical Discourse Analysis (CDA).

According to the analysis of the sociocultural practice of the news on the government's water management, the year 2011 was a very remarkable one in Thailand as the country faced enormous devastation in the wake of the most severe flooding in at least five decades. Prime Minister Yingluck Shinawatra who had taken office in the meantime had to tackle this disaster. To do this, the primer established the Flood Relief Operation Center (FROC) to deliver aid and to coordinate with other agencies, such as the Royal Irrigation Department (RID) and the Bangkok Metropolitan Administration. However, FROC seemed to be incapable of managing the water because it could not react to this crisis. In addition, as mentioned earlier, premier Yingluck came from Phue Thai party while MR Sukhumbhand Paribatra, the governor of Bangkok, come from the Democracy party. This means that water management was no longer just an issue of a natural disaster. Instead, it became a part of a political game between the government and the opposition. In this regard, the three Thai daily newspapers selected to focus on this situation, resulting in the discursive practice of the newspapers.

Based on the analysis of the discursive practice, the coverage tends to present the government's water management news in the same direction. That is, the three Thai daily newspapers are tended to present only one particular group of governmental representatives responsible for this issue, such as the premier, and water management experts without presenting the public's side, such as victims. In the presentation of the government's water management news, the text producers often present how to manage water and to cope with flooding the next time. Thus, according to the analysis of discursive practice, it can be seen that the content or structure of this news is presented in a similar manner. Nonetheless, when the author employs the notion of discourse approaches to analyze the texts of the government's water management, it was found that there is a power within the texts which is beyond the texts themselves. That is to say, news reporting has power, and the power of it does not only reside in the text on the surface level. The analysis shows that issues which get presented in the news are somewhat controlled and designed by the production of the news: i.e. selection of voice and linguistic patterns. Therefore, as the language used is constructed by the text producers, text producers can use only discursive strategies as one of the means to achieve their aims.

Based on textual analysis**,** the discourse on the government' water management is proposed not only to convey a certain kind of meaning, but also to shape public perception about the event. This is one example of discourse as a means of power abuse. It guides people to think or judge the government's water management news according to the same perspective as the newspapers do. For example, the presentation of a proactive action of the government in managing water by the use of the verbs "stressed" and "guaranteed" can make what the government has done feel credible to the public (see item 10 in Table 1)*.* Power abuse here refers to a hidden purpose of the newspapers to construct some realities or ideologies. According to Van Dijk (2008), the existence of newspaper power is mainly concerned with certain institution's discourse domination through exercising the power of language which basically not only has the potential to control people's minds, but indirectly controls their actions. In this regard, discourse domination deals with how to dominate language in order to achieve text producers' aims. Hence, the language employed to achieve those particular aims is called discursive strategies. That is, discursive strategies are simply examples of how language can be used to achieve social purposed. They are textual evidences which testify the hypothesis of CDA.

The discursive strategies used in the discourse of the government's water management are variously employed. Each strategy has its own particular function in terms of action and power to influence the readers' perception. The text producers are likely to present this issue both through concealing the actor, expressing the authors' attitudes or increasing the credibility of the government's activities in water management. As can be seen, for example, the author used impersonalization to conceal who exactly actors are or use naming to show their attitudes toward the person they mentioned or the author use verbs to strengthen the government's credibility. This means that, the journalists perform their function of supplying not only information but also opinions and criticism through the use of language. However, the use of positive representation, negative representation or wording employed in this particular newspaper coverage might not lead to a similar interpretation by the readers as what they interpret relies on their past experience or prior knowledge.

5.5 Recommendations

Based on the study of the discursive strategies used in Thai daily newspapers: a case of the government's water management news, the researcher would like to provide two aspects for further investigation, Firstly, it would be interesting to analyze the text concerning discursive strategies used in other newspapers or fields in the case of analyzing representation of social actors, action as well as wording used. Secondly, it would be useful to adopt this strategic analysis to examine in terms of editorials in order to reveal how these strategies help the authors convey their messages more successfully

References

At the Mercy of Our Politicians. (2011, November 1). Bangkok Post, p. 7.

Aon Benfield. (2012). *2011 Thailand Floods Event Recap Report: Impact Forecasting-March, 2012.* Retrieved November 24, 2011 from http:// thought leadership. aonbenfield.com/Documents/20120314_ impact_ forecasting_thailand_flood _event_recap.pdf

Apiprachyasakul, K. (2012). *2011 Thailand Flooding Crisis: An Analysis of Cause, Prevention Method and Flood Damage Reduction:* Bangkok: Media Focus. In Thai.

Conboy, M. 2007. *The Language of the News.* New York: Routledge.

Cook, G. (2004). *Discourse.* Oxford: Oxford University Press.

Dam, Water Management Designed for Older Era. (2011, October 23). Bangkok Post, p. 4.

Fairclough, N. (1992). *Discourse and Social Change.* Cambridge: Polity Press.

Fairclough, N. (1995). *Critical Discourse Analysis.* London: Longman.

Johnstone, B. (2008). *Discourse Analysis.* Malden: Blackwell.

Ministry of Natural Resources and Environment, Pollution Control Department. (2012). *Flooding Catastrophe 2011: Pollution and Tide.* Bangkok: Pollution Control Department. In Thai.

Reah, D. (2002). *The Language of Newspapers.* (2nd ed). London : SAGE.

Robson, M. and Stockwell, P. (2005). *Language and Theory: A Resource Book for Students.* New York: Routledge.

Schiffrin, D. (1994). *Approaches to Discourse.* Cambridge, Mass: Blackwell.

START. 2011. *The Study of Climate Change Impact and Vulnerability and Adaptation of Key Systems and Sectors to Future Climate Variability.* Retrieved January 12, 2013 from http://cc.start.or.th/Climate Change/Document/Doc_t hai_22.pdf. In Thai.

Van Dijk, T. A. (1988). *News as Discourse.* New Jersey: Lawrence Erlbaum Associates.

Van Dijk, T. A. (1997). *Discourse Studies: A Multidisciplinary Introduction.* London: Sage

Van Dijk, T. A. (2008). *Discourse and Power.* New York: Palgrave Macmillan.

Van Leeuwen, T. (2013). Representing Social Actors. In *Critical Discourse Analysis Volume 1.* Wodak, R. London : SAGE. pp. 291-326.

World Bank. (2011). *The World Bank Supports Thailand's Post-Floods Recovery Effort.* Retrieved December 15, 2012 from http://www.world bank.org/en/news /feature/2011/12/13/world-bank-supports-thailands-post- floods-recovery-effort

Ziegler, A. D., She, L. H., Tantasarin, C., Jachowaski, N. R., & Wasson, R. 2012. Floods, False Hope and the Future. *Hydro. Process.* 26 (May): 1748–1750.

Community-Driven Development through Strategic Communication: A Case Study of the Pidthong Lhung Phra Project under the Royal Initiatives Discovery Scheme at Nan Province, Thailand

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In early 2012, Khun Tanakorn Rachtanonda, the 54-year-old Manager of the *Pidthong Lung Phra Project (PLPP)* at Nan Province, one of the projects under the Royal Initiatives Discovery Scheme (RID) in Thailand, shared with a university researcher his experiences in rural and community development, focusing specially on the Nan Pilot Project for which he had assumed managerial responsibility in mid July, 2010. Khun Tanakorn, who was also Vice Chairman of the Working Committee of the RID at Nan, had come to join the Nan project after an earlier two years of experiences in rural and community development at the widely acclaimed Doi Tung Team of Rural Development in Chiang Rai province. As he reminisced about what was uppermost in his mind when he arrived at the Nan project site, he recalled having been concerned about how to design effective programs with the concept of community-driven development (CDD), emphasizing the giving of control of decisions and resources to community groups as the core practices. In particular, he had been keen to make maximum use of strategic communication to facilitate the acquisition of capacity building, service delivery, and social mobilization as guided by the King's model of Philosophy of Sufficiency Economy.

When he had been assigned to design, operate, and manage the RID scheme at Nan, he had been charged with making Nan as successful as the projects at Doi Tung – the Development Project (DTDP) that had been launched two decades earlier by the Mae Fah Luang Foundation (MFLF)[2]. With Doi Tung's Model of the *Mae Fah Luang Social Transformation* as the template for community development in mind, Khun Tanakorn was fully committed to an integrated and holistic approach to the Sustainable Alternative Livelihood Development (SALD), which aimed first to rejuvenate nature, empower the individual, and strengthen the community. To its core, the DTDP specifically promoted the four values of human wisdom, social well-being, environmental fairness, and economic

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[2] The name of the Foundation, "Mae Fah Luang" originates from the late Princess Mother, HRH Princess Srinafarindara. To the fill tribes on remote mountain tops, she is their 'Mae Fah Luang' or the 'Royal Mother from the Sky"—since she was often seen landing in a helicopter, the only means to get to the remote areas of Thailand. She had long supported the royal activities of her son- His Majesty King Bhumibol Adulyadej- and had always been active in the promotion of public health and education for the people living in the rural and remote areas of the country. (Source: The Mae Fah Luang Foundation under Royal Patronage)

prosperity. At the time that he had been placed in charge of the Nan projects, it had been explained to Khun Tanakorn that he had 12 years to make the projects work and to scale them up, after which he and parts of his team would be expected to move on to other provinces and teach the CDD approach to rural and community development. With that in mind, he had resolved the make the Nan scheme a glowing success.

The Royal Initiatives Discovery (RID) Scheme: Background, Foreground, and Challenges Lying Ahead

For 60 years, after ascending to the Throne in 1952, His Majesty King Bhumibol Adulyadej had worked to improve the living standards of Thai people, concentrating on the remotest parts of the country. His Majesty had always had initiatives to implement various types of projects aimed at helping people in the rural areas by emphasizing their active participation in the projects to further sustainable self-help, life-long learning and team work. During the 1970s, His Majesty initiated the establishment of the six Royal Development Centers (RDSC) throughout the country. The objectives were to provide knowledge and skill in rural agriculture in order to create and sustain self-reliance among the poor. The knowledge and technology transfer that had accumulated over the years eventually evolved into the foundation of the RID Projects.[2] HM the King's projects, driven by the Philosophy of Sufficiency Economy,[3] covered agriculture, irrigation, forestry, education, health, crop substitution, fisheries, land and road development, watershed development, animal husbandry, environment preservation, and human development. The results were the combined contribution to poverty-alleviation, sustainable development, and preservation of culture and jobs.

Along with the promotion of the Philosophy of Sufficiency Economy – with its core principles of moderation, reasonableness, immunity with knowledge and morality -- the King guided and encouraged the involved governmental agencies and bodies working in rural development to adopt his guiding principle under the slogan of *"Understanding-Accessing-Developing"* (the "UAD" approach) as the preferred mode to community development. This UAD principle reflected and characterized an idealistic, yet quite practical process of rural development. The King wisely recommended that government organizations should become competent in community-driven rural development, beginning, first, with becoming thoroughly familiar with the life ways, worldviews, and cultures of the targeted communities before attempting to plan and launch the development process.

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[3] The Sufficiency Economy concept was first mentioned in 1974 when His Majesty the King Bhumibol Adulyadej of Thailand suggested that*: "Economic development must be pursued sequentially step-by-step. It should begin with [the] strengthening of our economic foundation, by assuring that the majority of our population has enough to live upon. Once reasonable progress has been achieved, we should then embark on the next steps. Here, if one focuses only on rapid economic expansion without making sure [the] plan is appropriate for our people and the conditions of our country, it will inevitably result in various imbalances and eventually end up as failure or crisis as found in other countries"* (Royal Speech, 1974)

Up to the present, this UAD approach, which was simultaneously both the foreground and the background of the RID, had been kept intact and practiced throughout the variety of development projects under the RID major scheme. Nevertheless, in practice, albeit adored as a guiding mission, the UAD approached had not been without some recurring problems. The past and the current RID implementation and outreach to rural communities created and sustained the existing culture of RID development programs, which in turn created a new background against which future implementations were to be perceived and interpreted.

The most severe problem shown lay in the fact that poor Thai people were still treated by the vast majority of governmental bodies and demand-responsive support organizations and service providers as mere recipients of externally designed poverty reduction efforts, not as "prime actors" in the development process. Some programs were not *responsive to the local priorities*, and to a certain extent, excluded the poor and seemed to have been peremptorily imposed by the national authorities and central technocrats. Control of decisions and resource mobilization were not lodged within the communities -- which was thought to be attributable in part to the influence of the hierarchical nature of Thai society and culture. Consequently, some of the projects and programs proved to be ineffective, inefficient, and unsustainable. Additionally, because of a lack of transparency in the conduct of public affairs, the poor even lost confidence in, albeit not respect for, their local leaders, which in turn had often led to the rejection of the programs right from the moment they kicked off.

Meanwhile, some previous projects launched under the RID scheme, although quite successful, had limited impacts and were not capable of being scaled up to achieve national coverage. This was, in part, due to the absence of dialogue or consultation among various stakeholders, especially with respect to the rural communities, along with a lack of strategic communication management and intervention programs at the institutional level. In time, this situation has precipitated a call a serious paradigmatic shift – one with an emphasis on *community-driven* development (CDD) as the major approach. Nan province, as the poorest province, was thereafter selected as the pilot for implementation of the RID model of participatory development, one in which the crucial role of communication and communication management would be magnified.

The *Pidthong Lhung Phra* Project (PLPP) at Nan Province: Rationale, Missions, and the Show Case of the Pro-Poor Approach

Nan Province was the first eligible province selected to represent the prototypical development model for participatory development of the rural community in Thailand in compliance with the Government's Resolution in 2008. The justification for picking Nan for the pilot *Pidthong Lhung Phra* Project (PLPP)[4], was due to many factors[5]. Foremost among these was the fact that, although the poorest province in the country, Nan possessed the strong provincial networks of more than 128 working bodies of institutions. The wide range of more than 100 municipal government bodies, and enthusiastic local civil society groups and volunteers made Nan an attractive venue for the pilot project. The majority of the population in the 15 targeted villages under the RID scheme was the poor hill tribes called Luar. Unable to grow sufficient amount of rice to consume within their communities due to the prolonged drought, as well as the old style of rice farming that the residents used, which reduced yield to only 17-20 barrels per rai, and necessitated 90 per cent of the residents of these villages regularly having to buy rice for consumption. One consequence of all this was the need to engage the slash-and-burn type of agriculture that both polluted the environment and destroyed the natural landscape as more rai of heretofore virgin land came under the plough. Despite this, Nan was quite famous for the richness of its flora, fauna, and landscape. It was a watershed of many rivers and streams, with 7 national parks and 51 Headwater management units within its boundaries.

From its inception plan, PLPP was scheduled for implementation in 2 phases: The first phase (June to October, 2008) was to entail gaining access to the targeted areas of development to collect the data and gain an understanding of the communities; and, the second phase (October 2008- May 2009) was to focus on running the CDD model under the supervision of RID team. After some early delays in each phase of the original plan, the successive plan was ready to become fully operational in 2010. The main objectives of the program were to promote and disseminate the bodies of knowledge under the RID scheme and to scale up the participatory development paradigm to reach nationwide efforts. The PLPP's mission then was to systematically conduct the knowledge management process and to promote the RID framework of rural development with community-driven development or CDD as its core. Concomitant PLPP objectives were the promotion of tourism on the Royal Initiatives projects, public relations, networking creation and maintenance; and, effective project management.

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[4] the Buddhist-based phrase in Thai, translated as "*Gilding Behind the Buddha Image*", which meant *'a person must commit good deeds with no needs to proclaim his merits to others'*.

[5] The six major criteria of choosing Nan were: 1) the strong local community networks; 2) the strong local municipal government bodies; 3) pressing problems facing the province; e.g., poverty, disaster, degraded natural environments; 4) availability of existing data and information in relevant aspects; 5) richness in natural resources as world legacy and PLPP would perform as an integral part of the natural preservation efforts; and 6)PLPP would be the showcase of how to apply the systems thinking in solving problems and become the CDD model of development.

Under the Khun Tanakorn's leadership as PLPP manager, 21 villages in the Nan province with a combined population of 8,450 people were targeted. The first three villages (Ban Yod, Ban Palak, and Ban Namkor) were located in the Songkwai district; another three villages (Ban Nam Pak, Ban Huay Thanu, and Ban Huay Muang) were in the Wang Pha district; and, the remaining fifteen were located in the remote, high mountainous district of Chalerm Prakiat district. Right at the core of the PLPP framework of rural development were the three major guiding principles:

The first principle. PLPP would promote participatory community-driven development pertaining to the six major RID-based bodies of knowledge – i.e., Soil management, Water management, Agriculture, Forestry, Environment, and Alternative Energy. It was believed that these could be adjusted to fit well with the socio-geographical conditions of each community. The main emphasis was on the concept of "participatory development" where local people in the rural areas could participate in problem analysis and in the development process, along with the government bodies and the PLPP team, in order that the full sense of ownership of community development could be nurtured and sustained.

The second principle. PLPP would vigorously promote the Understanding-Accessing-Developing (the "UAD") approach to community development. Then 'accessing' to the community via strategic communication with emphasis on participatory communication would be enhanced. With this principle, the need for life-long learning to maximize the community's capacity for development through effective team-building and effective design of an integrative community development menu and curriculum was clear.

The third principle. PLPP would adhere to both the Royal Code of Working Behaviors Conduct as set forth by King Bhumibol Adulyadej and the PLPP Working Principles directed by the RID. The Royal Code endorsed five qualities-*cum*-practices: Work behaviors that tended to promote the adoption of a holistic perspective on things; an emphasis on the study of relevant data and information; the0ry-free detachment (bracketing what theoreticians claim to know); advocacy of participation; and, social contribution and benefits to all mankind based on the Philosophy of Sufficiency Economy. These PLPP Principles would advance the concept of 'internal bursting" whereby local communities would develop a craving for learning and problem-solving based on their internal locus of control – with the problem-solving process focusing on the ability to detect the small areas of problems, step-by-step procedures, self-reliance and moderate living in response to the exigencies of the particular socio-geographical environment.

Finally, in working and carrying out the RID scheme at Nan province, the PLPP adopted the water management analogy with the metaphor of *"TonNaam-KlangNaam-PlaiNaam"* as its guiding conceptual philosophy. *TonNaam*, or the Headwaters, connotatively meant to uplift the "downstream" activities by gathering all the bodies of knowledge under the RID scheme, with the intent to make the best practical use out of it; *PlaiNaam* connoted the "downstream" or the localized knowledge integration at the village, community and provincial levels in combination with the RID bodies of knowledge adjusted to mix and blend with the local wisdom and ways of life. Situated at the centre of the river or at 'Klang Naam' of the water flow, the PLPP would symbolically stand and perform as the bridge over the headwaters and the water outlets. The key objectives of the PLPP were to support and enhance knowledge management, development promotion and the creation and maintenance of the networks of alliances.   At their core was the emphasis on the practice of the participatory management via strategic communication management programs.

Khun Tanakorn and the PLPP: Making the Philosophy of Community-Driven Development into Realities -- Personal Values and Vision of Participatory Leadership

For decades, the inability of the successive governments to deliver basic social services to rural people had led many to question the conventional paradigm of community development and poverty reduction strategies used by several governmental bodies. In particular, in Khun Tanakorn's view, a service delivery gap in development had co-existed alongside high levels of poverty in rural Thailand. Due to the lack of proper understanding of the community where the local people had not been treated as important assets of development process, the absence of genuine service delivery from the government to the communities -- along with inadequate capacity building and social mobilization – had made for limited, if any, sustainability of the projects. As an appointed manager from the RID, and a local person of Nan, Khun Tanakorn himself resolved to adopt the holistic approach to community development in running the PLPP, following the DTDP model and with UAD approach (*Understanding-Accessing-Developing*) as the core philosophy. He targeted 48 sub-villages in the three sub-districts villages -- namely, Ban Yod, Ban Phalak, and Ban Piang Sor with a total population about 4,000.

Khun Tanakorn shared what for him had been the profound values and visions gained in his first-hand experience working as social activist and manager at the Doi Tung, along with his personal espoused and enacted values in the CDD approach based on the Sufficiency Economy Model. To him, the set of core values that he would strive to transform into practices was to run the project through empowering the people involved (both for his team selection and team building), thereby developing sustainable communities. From Khun Tanakorn's perspective, empowerment was not an outcome of a single event, but rather an ultimately continuous process that enabled people -- namely, the PLPP team, the village activists, and the local people in communities -- to understand, upgrade and use their capacity to gain better control and power over their own lives.

In implementation, the PLPP followed the DTDP's model which embodied the Princess Mother's belief in human goodness, potentials, and dignity. It provided the villagers with choices and the ability to choose, as well as to gain more control over resources they need to improve their life conditions. Concerning the implementation philosophy and process, Khun Tanakorn elaborated:

> *Community participation and building institutions of the people at the grassroots is the very essence of what we have been doing here. The success of CDD is conditioned by [the] local cultural and social system.. [CDD at Nan] could achieve its goals, not with the application of theories or models proven to be of success elsewhere. It is best done by its own ways fitted most with the local context of Nan. Nan calls for Nan-specific model of development. [As} guided by the DTDP model, our project is sequenced into 3 phases: survival, sufficiency, and sustainability. We must make sure people have enough food to feed and create no more debts. Then people would learn how to make the best use of existing resources with appropriate knowledge and skills, and work more productively to get rid of their debts. Eventually, they would become self-sufficient. Despite the fact that our role model of development is taken after the lessons learnt from the renowned DoiTung at Chiang Rai[6], we need to adopt, adapt, and be truly responsive to the localized needs and wants at Nan.*

Hence, the holistic approach was used as framework to embrace practical values combining service delivery, capacity building, and social mobilization as the means to people empowerment.Herein Khun Tanakorn emphasized the approach of *Understanding-Accessing-Developing (The UAD).* He stated that understanding and gaining access to the communities was very essential to the program implementation.

> *First and foremost, we need to go out into the field and collect data. We need to understand the people of each community and listen to their real needs. We need to understand their Community Calendar. We must learn to know, to understand, to respect their cultural life ways, to least interfere or coerce. To me, community-driven is citizen-driven with respect and human dignity [standing as its core. I believe it is about [giving people of] chance and opportunities. From the past, I could say that the rural people weren't given much opportunity in having their own voices made and heard. Here at PLPP, what we have done [so far is quite different]. [First], we simply ask them about their concerns, their needs, and their wants. We evaluate our team*

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[6] Doi Tung Development Project under the patronage of H.R.H. the Princess Mother was established under Royal Initiative on January 16th, 1987, with the objective of undertaking the rehabilitation of degraded forest areas covering a total of 27 villages situated in the Mae Fah Luang district of Chiang Rai province. The project succeeded in getting rid of opium planting, drug use, and poverty through sustainable alternative development. Hill tribe communities (i.e., Lah, Tai Yai, and Akha) and Chinese migrants were encouraged to grow fruit trees and other cash crops as substitutes for poppies and slash and burn cultivation. The project's accomplishments received an award from the United Nation for sustainable alternative development and has become an internationally-recognized model of sustainable development. For The Social Transformation Model, consult Exhibit 1 for more details.

performance from the community satisfaction levels. It is a must then that PLPP keeps continuously recording every move we have made. . . as of now, we have inventing so many innovative things in rural development. . . We have now the Maze Funds, Pig Funds. Things must be tangible. The revenues of the villages must be generated more and help individuals to be capable of paying debts and having more saving per household. On average, the amount of debt per household is about 50,000 baht. In overall, we PLPP need to follow up and monitor how the quality of life of people here has been improved after we have been all in.

Strategic Communication for the Community-Driven Development: The Three Dimensions of the Operational Management Tool

To Khun Tanakorn, communication was central to collaboration; and, collaboration was the basis of partnering. Partnering was both a practical management tool a mechanism for managing relationships with cross-sector partners and beneficiaries. Communication was then essential for "gaining the access" to the communities, and for ensuring the active participation of all stakeholders in the development and implementation of PLPP throughout its various phases. Communication skills that could flexibly vary -- from interpreting between various people and perspectives, to promoting appropriate partnering behavior, to encouraging respect among multi-stakeholders, to empowering others to communicate, to seeking ideas and opinions to inform constructive changes within and beyond communities -- were found to be of great importance to the success of the programs.

In particular, service delivery and capacity building could not be made possible and successful without the facilitating role of advocacy and participatory communication, both of which were managed at the institutional and at the community levels. Communication then had to be enhanced at all times to create an open and inclusive dialogue both within and across structures of both teams and communities due to the fact that accountability, ownership, and participation depended on good communication. Well-crafted, effective and efficient communication management could lead to the emergence of real social mobilization.

At PLPP at Nan, Khun Tanakorn had to strategically design and organize the overall communication management process. In developing the strategic communication programs, there were three major aspects of communication management to be operationalized and managed. The first one was a function of the fact that PLPP operated with the management of the institutional communication flow at its nexus. PLPP core messages – including its objectives, concepts, activities, audiences, channels, processes and pitfalls, and the two-way open communication and feedback flows – needed to be enhanced and made clear to the three targeted groups: the PLPP Teams, the village activists, and the related local government bodies/community and civil society networks. This was part of the process of institutional strengthening and social mobilization. Herein, Khun Tanakorn explained in general the many reasons for communicating with respect to partnership promotion: raising awareness, engaging new partners, keeping everyone involved, managing the tasks and

people assigned, recording the progress, and informing the wider public in and beyond the communities. He elaborated:

> *Here at PLPP, we believe that effective and strategic communication can help raising the right kind of awareness among every party involved. We want to assure a continuous flow of information about everything I have been said between us, PLPP as the service providers and the villagers as end users of services. This will enable the latter to be equal partners, hopefully, in the planning, delivery, management and evaluation of those services provided.*

> *As I already mentioned before, capacity building is such an important and integral part of our CDD approach. On the institutional levels, village activists and office holders are trained in administration and development management. Later, we tried to reach out to other targeted groups of ours. With the focus on inclusion and expression, we have brought the stakeholders -- be they the local government, the non-government[al][entities], [or the] targeted communities -- into our PLPP process where we try our best to solicit their views and opinions about the most important development issues they face. This is what I call the "spirit of open discussion." The use of communication management could at best ensure the process of inclusion by sharing knowledge and ideas, addressing social and community issues, along with promoting all elements and means of sustainable development and of course by enhancing the potential for informed debate and feedback. The amount of feedback they generate could be a measure of good communication, and in turn, of participation.*

> *Importantly, our programs have brought together like-minded local allies [who share common goals with us]; that is, to make Nan prosperous in a sustainable way. We PLPP cannot afford working here for [these] 12 consecutive years alone by ourselves. [What we need are our abilities to work with the broad-based local alliances]. And that is what the real social mobilization means... To be able to convince and persuade people are also core to our communication efforts.*

The second aspect of communication management to be operationalized and managed was based on the very practice of advocacy communication in fostering the PLPP's development agenda. Such development initiatives had to be made and promoted in relation to the six major RID bodies of knowledge in the realm of natural resource management -- Soil management, Water management, Agriculture, Forestry, Environment, and Alternative Energy -- with major emphasis placed on the development, organization, and promotion of the notion of "ownership of the community". The seven key PLPP principles and practical steps in community development were conceptualized as a 7-step process: 1) the Creation of Mutual Understanding; 2) the Area Assessment; 3) Knowledge Transfer and Capacity Building; 4) Program Implementation; 5) Learning and Exchanging for Continuous Development; 6) Service Delivery through Coaching, Counseling, and Monitoring; and, 7) Evaluation and Scaling Up. Khun Tanakorn stated:

> *PLPP provides strong advocacy for [the] CDD approach to development and its development agenda from its start. We need to create the communication environment where mutual trust and the invitation to engage in dialogues are essential. Both in principle and practice, we have followed the Big Seven PLPP steps. What we have done so far was so many things, many aspects to share here. We have emphasized the PLPP work towards the eradication of poverty in the long term by trying to increase household disposable income and by introducing and creating the new means of production and employment opportunities, we have promoted . . . more degree[s] of local control of resources and natural resources in the above-mentioned six dimensions through life-long learning; we have improved the access of village activists, community facilitators and [the] community [as a whole] to reliable community development-related information, where coaching and mentoring in rural agriculture and development are provided. And we have tried to increase people's demand for, access to and utilization of our PLPP services. We have tried to increase their access to the PLPP means of sustainable production and natur[e] preservation.*

Lastly, the third aspect of communication management to be operationalized and managed was the development of communication management as a PLPP operational tool to identify, investigate, and analyze the needs and risks of audiences, together with the problems to be addressed. Moreover, the communication process had to be dialogue-based in mobilizing resources with alliances and multi-stakeholder groups. Khun Tanakorn continued:

> *What is very important is . . . the capacity to identify our multi-stakeholders' needs and risks. What do we want? What do they need? What are some risks perceived by us and by them? How could we PLPP use communication to raise people's consciousness about what their rights are? How could PLPP learn to influence community development-related actions by assuring active people's participation in informed decision-making? What is possible and do-able, and particularly on how it can be done? And what is not? These are all questions to be answered in advance and in continuity of the programs.*

> *With our approach and our successive evaluation at each endeavor, however, we could see that people in our targeted communities have learnt to cease to be passive recipients of services delivered. They have showed us that they have demanded a role of responsibility for themselves and their communities, in determining the type, quality, quantity, place and focus of such services. They have already taken an important part in both the decision-making process and in the delivery mechanisms.*

We have planned our exit strategy in advance. We are sure that within the next 10 years, with our communication management programs, along with our impact assessment support to the PLPP teams and engaged communities, Nan will be prosperous as we strive for more equity, economic justice and fairness. We have now created momentum, and we will try to reinforce the sustainable continuity of the PLPP process. Through more democratization of access to data and information, I believe, (and the set up of [the] PLPP approach that was designed with a set of activities . . . to raise incomes for community as a whole and for women in particular, and to improve livelihoods and social welfare sustainability), the levels of risks facing us and them would be much reduced. Through a more democratization of access to data and information and the set up of PLPP approach that was designed with a set of activities designed to raise incomes generations, for community as a whole and for women in particular, the risks facing us and them would be much reduced. This would lead to the improvement of livelihoods and social welfare sustainability.

The Use of Strategic Communication for the Acquisition of Service Delivery, Capacity Building, and Social Mobilization

According to Khun Tanakorn, service delivery addressed wide ranges of actions directly related to immediate causes of mal-development. It provided a structured set of services to defined beneficiaries in a culture-sensitive and gender-sensitive way. In the delivery of services, it was important that the existing local human resources be maximized in utility. Most people in the communities should be capable of understanding the rationale behind the services being offered. More importantly, community representatives should participate in making decision about the services being delivered. Khun Tanakorn explained:

From our modest beginning, the holistic approach to community development was applied. To start with service delivery, PLPP Staff was preferably recruited locally. The training of our staff is mostly competence-based, in-service, aimed at both attitudinal and behavioral change and followed by regular support supervision from PLPP Team. For the communities involved, before we render them service delivery, we [have] exercised equal opportunities to welcome everyone in the communities—the elderly, women, children, even the drug addicts to join our program, to acknowledge our goals and to share with us their thoughts on how to make their villages successful in the development efforts. At the village of Ban Piang Sor[7], we had a case where we welcomed a group of teenagers, [whose behaviors] the villagers [had] found disturbing and undesirable in several ways -- for instances, drinking alcohol] to participate in our programs. We teach, train, communicate, and coach them to be parts of our livestock teams. The teenagers have learnt to take pride in taking care of pigs. They could run the team building on their own and learn to be valuable assets to their villages. When they start to be competent, we will rotate them to other villages

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[7] Ban Piang Sor, located in the remote mountainous highland district of Chalerm Prakiat. The villagers were originally the mixed hill-tribes, with animistic beliefs as dominant mode of indigenous culture.

and learn to teach, to share, to take good care of one another. I could say that whatever the villagers want and need, wherever their problems exist, they are not ignorant of their needs and wants at all. They know their problems well. We, PLPP, will not force or press them to open up to receive what we think we know to them. But we start by listening [empathetically] to them and valu[ing] their opinions.

For capacity building, the tactic was to attempt to raise people's awareness, knowledge, and skills to use their own capacity and to construct together a shared conceptual framework of the causes of the problems in order to resolve the underlying causes of maldevelopment. Capacity building was also aimed at helping people in the communities better understand the decision-making process by exposing them to relevant information, especially information about the underlying and basic causes behind their problems, so as to change their perceptions and behaviors. Khun Tanakorn strongly held onto the belief that capacity building was about investing in human resources development. PLPP emphasized the provision of skills that would lead to community ownership of the developmental interventions undertaken. Since it enhanced the ability to effect desirable changes in personal and collective habits and practices, capacity building could strengthen the PLPP process in the community and lead to more sustainability. On this all-important endeavor, Khun Tanakorn expounded at length.

Capacity building is at core of our development efforts. We [have tried to] raise people's consciousness about their natural environment. We focus on the training of the local leaders and building growing constituencies for[achieving] people's rights-based strategies. We teach them to carry out social and political mappings that point to the current structure and processes of control of their valuable resources. We believe that through capacity building, it could at best instill in my people, my teams, our village activists, our community validators and our targeted communities a sense of confidence to manage their own lives.

Here at PLPP, we will try [our] best to enabl[e] staff, individuals, families, communities, and organization continuously to upgrade their ability to know, analyze and understand their situation and their problems through information dissemination, information giving and sharing and training from experiential learning. Equally important, we give people a better income capacity via access to our available PLPP support systems. For example, we will start with providing economic incentives to the villagers. We PLPP have introduced the benefits of sedentary agriculture by telling and selling them about the notion of substituted cash crops -- like asparagus, green peas, and broccoli which grow faster and need less time to take care of; but [which] could fetch higher market prices. And we teach them how to grow. Like asparagus, we grow them only once, but we can leap the benefits for 7-10 years. Only one problem is that the major plants are located in Rachburi,

rather far from here. Even now we might foresee some logistic problems, we must try for the better economic opportunities of the villagers. This is what we would learn together.

I myself have practiced what I call 'the integrative operation'. This means networking with others, striving for achieving a mass of concerned people locally, and building coalitions by expanding the power base through solidarity are very important. We live and work together according to our plans. I also have my hidden agenda behind our crop-substitution projects, that is, if we try to teach them to grow asparagus, they will take care of its sprouts, its buds, so they would have no more time left to practice 'the shifting cultivation' where they deforest and cause serious damage by deforestation areas; or practice the old method of 'slash-and-burn' cultivation. This is what his Majesty the King once said about the Idea of 'Growing Forest without Growing'. If the villagers stop deforest, the existing forests would grow then.

Here is my wish: I want to see the villagers live with more hope. We also teach them about economic forests, like ratten and palm fruits, the local plants here at Nan which needs 6 more years to grow and be able to transform and used commercially. We will establish the Village Fund for Transforming Economic Forests in the not-too-distant future. We need to organize people's actions effectively to use and progressively control resources which could lead to a consolidation [of] a new and growing power base of the people. This is for the sustainability of the projects.

In referring to social mobilization: Khun Tanakorn explicated PLPP's embrace of a community development approach that could get people actively involved in the co-development of PLPP processes which addressed the basic causes of mal-development. The overall thrust was that of facilitating an increase in the community's power base, to legitimize their claims, to fight for their rights and to gain more control over the resources they might need. Khun Tanakorn commented as follows:

For social mobilization, the village activist is a key figure to the program's success. We aim at communicating and mobilizing our resources, to start with our PLPP teams, most of them are village activists, and then, our targeted communities. PLPP attempts to gain access and raise these people's consciousness to collectively identify problems, search for solutions, to assess their impact and to legitimize their claims. By decentralizing decision-making, we encourage shifting control of finances to the local sphere. This simply means that at every village we have engaged, the PLPP-trained village activists will be taught to learn how to do community financial accounts. And they will[then go out transferring and teaching] teach the community. If they ever need budget allocation for building any physical infrastructure; e.g., irrigation channels, micro hydroelectricity, roads, drinking water, or any special initiatives for livestock/ etc., they must prepare all the written documents to justify their claims with all needed documents and empirical evidences. This shows that they have learnt to exert an effective demand for resources other than those readily available to them.

> *It is quite obvious that we give them power over decisions through the mobilization of community power, thus increase their self-esteem and self-confidence when budget allocated. Furthermore, by increasing local democracy with people participating more actively in their communities and in local government bodies, villagers across the villages must learn to act as strategic allies in exchanging and introducing new ideas among them[selves], so they can press on with needed advocacy and effective lobbying among themselves. This is an important mental infrastructure that we PLPP teams would like to make happen to secure the very true sense of people empowerment. The great demands are placed upon the building and maintaining of networking, building coalitions and consolidating sustainable community and social movements. They need to work proactively and concretely with all strategic allies to mobilize their social power. This could not be made possible without effective communication management.*

In summary, in the discussion of the overall PLPP process of communication management based on the PLPP community development approach, Khun Tanakorn emphasized the importance of designing the dynamic process of developing consensus and a mandate for action through the three-dimensional advocacy and participatory communication in the acquisition of capacity building, service delivery, and social mobilization.

The Multiple Voices from the PLPP Teams: Where Communication Challenges and Difficulties of Strategic Communication towards CDD Development Interface

From the inception of the PLPP operation at Nan, at the institutional levels, village activists and PLPP office holders were trained in both administration and development management. Experience showed that, given access to information, and appropriate support, the PLPP team, the village activists; along with the communities could organize to manage and carry on the PLPP missions. Not only did they have greater capacity than generally recognized, they also had the most to learn and to grow from making use of resources targeted at poverty reduction and the improvement of life conditions through the use of strategic communication.

From the first phase of PLPP until the beginning of the year 2012, the program attempted to enhance sustainability, improve program efficiency and effectiveness, and advance poverty-reduction efforts in the context of Nan. Capacity building efforts were made. On the production side, village activists were trained to maintain community infrastructure and provide fundamental and technical services to the targeted communities. Moreover, natural resource development, which was fundamental to rural livelihoods, was enhanced in concert with PLPP's goals. A number of infrastructure projects and a number of units had been built. A total of 67 weirs and irrigation projects were built across the targeted villages, 450 rai[8] of the land were developed, and a number of specialized funds were

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[8] Equates to 1,125 acres.

introduced to the communities – .e.g, Poultry Funds, Pig Funds, Fish Funds, Grain Crops Funds, Vegetable Grain Funds, Rice Grains Funds, Corn Grinder Funds, Long-termed Agricultural Development Funds, and Economic Furnace Funds.

The five key persons in the PLPP teams, whose paths had crossed in various ways, shared their individual views on PLPP programs as a whole and also on the role of communication as a means to reach out to various stakeholders. Whether their individual points of views were divergent or convergent, all reflected both challenges and difficulties of the CDD development efforts.

Benjaporn Nairaj, a 24-year-old member of the PLPP Team, shared her opinion on the initial promotion of PLPP, which had focused on creating an enabling environment. Difficulties of capacity building, including the essential element of communication, were pointed out.

> *For me, [the]understanding-based challenges [were the most prevalent]. [Our first challenge was that of teaching] how to grow the rice. . . .[That] was by no means easy. [We faced a] number of problems. . . . in the field. [We learnd that we must be patient and learn how to gain access to the villagers and how to communicate with them. Some villagers asked, "How much [will] I be paid?" They expected everything to come from the state. Previous experiences had taught them that some government bodies just came, gave money, and exit[ed], [leaving in their stead] no real sustainable development. No transformation of the communities. No hope. No trust.*

> *Before joining the PLPP team, I used to think that [the work] must be easy, but it was not. Some staff. . . quitted and resigned after 2 weeks [of being] posted to work at[a] remote [location] like Ban Piang Sor. Over there, life was difficult: No electricity, no signals for telephone [service], etc. [Plus] it rains heavily. Without strong conviction and [dedication],staff quit. For instance, we used to send out [around 20 staff persons], but[ultimately] only 7 of them survived the field-based training and only 5 [now] remains [on] the PLPP team. But once I [became] part of the program, [I and others] are so proud being part of the development efforts. We have co-designed, monitored, and enjoyed all the progresses [that we have continuously] made. When the rain falls. . . and we need to go out with the villagers to measure the water level. To build one unit of [an] irrigation channel, we [all] , the villagers [included], must lend helping [a] hand. . . to make it happen successfully. Problem-solving is an integral part of every decision making process. Two-way communication is core to us here. We work, we rotate, we learn together as PLPP team.*

On the issue of value-based obstacles where stood political tensions, obstacles and the hidden agenda of different groups of stakeholders in PLPP projects, Benjaporn revealed how PLPP had to endeavor to boost staff's negotiation capabilities due to some local groups not having enough respect or appreciation for each other's value as partners:

> *We need to know how to be politically correct. We will not practice head-to-head confrontation. We don't fight with the local powerful players. If we . . . aggressively moved, we would not be capable of entering the village peacefully and gaining the access to the targeted villagers. In fact, the first moment PLPP stepped in and wanted to make some changes that affect the community ways of life -- e.g., we encouraged them to stop growing cornfields, resulting in people forming a mob, backing up by some local NGO. The spreading of PLPP threatened the authority of these NGOs who traditionally had been in charge of development in the compounds. It was clear that some NGOs want the villagers to continue growing corn. It has to do with the issues of economic milieu, trade benefits and the[ir] role as middlemen. PLPP then needed to know how to communicate, persuade them, including those NGO to be our alli[es]. Incentives have been promoted. . . . There are also some cases where the headmasters of the village abused their powers by corrupting our resources; for instance, gaining the advantage from our water pipeline project by making the pipelines to pass their personal farmlands. Later, we would hear nothing about it. The villagers hardly acknowledged PLPP contributions. The villagers just said they have got nothing from PLPP.*

Twenty-nine-year-old Pattamaporn Pichai, Head of Ban Yod's Team of nine involved PLPP village activists and ex-Head of the Village of approximately 111 households, described the relationship between capacity building and the essential role of communication in rural development:

> *Doi Tung Teams have coached us how to communicate with the villagers before we go into the village. With the villagers, we talk with them and we ask them simple questions like "What is in our forest?" "What do you get out of the forest?" "Have you ever grown any plants back to the forest?" "What should we do for our forest?" We then started to bring up the issues of environment preservation and sustainable agriculture. We gradually tell them about the idea of Economic Forest or the forest that could generate better revenues for them in the not too distant future. The villagers start to understand that they need to grow the economic plants, . . . the local plants that could help them to pay the debt. Communication is the key to build understanding. All I could say is that it is very challenging…. I think the most difficult step is in getting access to the community in the first place and mak[ing] the villagers learn to open up and build trust in PLPP.*

Eak Prompinij, a 25 year-old village activist on the PLPP livestock team at Ban Piang Sor, advanced his opinion about some of the hardships encountered in gaining access to the villagers and in building the rapport through communication:

> *At first, we PLPP team [members] were quite discouraged for some time. The villagers at Ban Piang Sor did not welcome us. But they waited [to] see how we were going to do for them. They wanted to know the benefits they gonna get and the relevance of PLPP to their lives. They refused to believe that PLPP could make "the water flow upwards to reach the mountain high". Previously, they would do the agriculture only for once a year and paused for the rest of the year after that. But after PLPP came in and [taught] them how to grow supplementary plants, and to do full-fledged agriculture all year round, their lives are better.*

> *For the first five months, we did nothing but talk with the villagers. We gained access by building relationship and understanding. The hardest groups to gain access to were the troubled alcoholic men. After going out to do agriculture, they get back home and boiled the alcoholic drinks. But we keep communicating, talking to them, listen[ing] to them, and keep revisiting their families. We open up to both men and women. We talk to the whole family. We talk to the youth and screen some of them to join our volunteer team. We must have [a] service mind.*

On the issue of local beliefs and spirituality, Eak continued to state the importance of cross-cultural understanding as a precondition for genuine communication.

> *Previously, the villagers [had] faith in their natural leaders . . . like shamans or spiritual leaders. At Piang Sor village, they have only a few dominant families of clans called 'Pok'. They were animistic[in their belief system]. Each family, each clan has their own assigned 'Karma Day'. If anyone happens to work or make any noise in the family on that particular day of the Karma Day, the spirits would get angry. All bad luck resulted.*

> *In 2010 PLPP stepped in, [but] the villagers did not welcome them. They did not cooperate and give no information needed. PLPP came with good objectives to develop Piang Sor. But in the eyes of the villagers, they were against the Spirits or "Phid Phi". Rituals are important. The Sheriff of Chalerm Prakiat then needed to strategically step in. With the sole intention to help PLPP, he tactically announced himself as the Great Shaman[,] . . . arrange[d] [a] party for treating the shamans from the other 15 villages, and conducted the Baisri ceremony to communicate directly with the Spirits of the villages [to find out] whether they would allow the entry of PLPP team. And for sure, the Spirits, through the medium-mediated communication, allowed such entrance.*

> *Previously, the villagers here have practiced the slash-and-burn cultivation. I could say they have something to eat for 7 months; and [in] the [remaining] 5 [months of the year were the hard time by which some of the villagers]were . . . close to starving. They were poor. Thanks to PLPP, now they have seen all the new infrastructures built: we PLPP offered an infrastructure project and a number of units have been built: irrigation channels, micro hydroelectricity, village roads, drinking water, etc. PLPP have learnt about the Karma Day and all the local beliefs and respected the local ways of life.*

Twenty-eight-year-old Nattanicha Mungkhala, Head of Ban Nam Pak, talked about staff capacity and skills, in relation to communication practice. She commented on how their skills and confidence, as a team, have been improved, as well as the efforts invested for common good for the community betterment. She stated:

> *First of all, I would like to thank to PLPP for setting up such a good system for monitoring, communicating, and learning. And of course [thank] my team here at Ban Nam Pak for the efficient support, two-way communication and good logistics which kept the work moving, even at a difficult period. Now the villagers and communities have hope. They dream to be able to be financially independent with no debts. Now each household's debt is about 50,000-60,000 baht. After PLPP stepped in, the rice production per rai has increased from 35 barrels to 65 barrels. [Cultivated rai has gone from] 34 rai to 382 rai. This is the real development. Here, both men and women help one another for 2 years already. I am so glad PLPP has come here to make Nan the prototype of community-based development. In 2008, Ban Nam Pak had only 37 rais of rice field left after the flooding situation. Now with the entry of PLPP, we have now 221 rais because PLPP has taught us to do soil improvement, digging up more and expanding the land, with proper water irrigation.*

She continued, addressing specifically the PLPP communication plan:

> *We work upon our plan. We have had regular staff meeting[s] where every staff share[s] our experiences. What have we done or might we do to address communication challenges? Here we have tried to create a culture in the partnership where everybody could express disagreement and keep our communication simple and straight-forward. We are encouraged to speak our mind and put our point of view as we wish to. Then Khun Tanakorn as facilitator will summarize the problematic issue, pointing out clearly the perspectives of each staff and the importance of the issue, [as well as the implications of not addressing it well].*

Woraphon Chaisri, 42 years of age, PLPP team, Career and Wisdom Development and *Shaman* (village spiritual leader) at Ban Nam Pak shared his opinion on the sustainability of the focus on community development over time through communication management. He talked about his loss of mother and grandmother on September 5th, 2008 during the flooding situation, a calamity that had been a turning point in his life. It had been then that he made a determined decision to do something for the betterment of the village:

> *PLPP moved in and continue[d] to build the community capacity on a number of fronts, including needs identification, project design, and project management. Here we used to have the problem of landslides and instant flooding situation, where I lost my mom and my grandma. It was then that I decided to join PLPP. I was born here and have been the village spiritual leader here at Ban Nam Pak. People have faith in me. When they get sick or need some kinds of ritualistic activities, they come to me. Once I decided to join PLPP, people also extend[ed] their faith to PLPP mission. PLPP told them that the community must be strong. They must actively engage in their own problems. It happens here where people help each other in the belief that we, poor people, must be willing and able to work to improve the welfare of our own communities in a sustainable way. The King was not here, but he would [eventually] know [that] we did this for him, to make him proud of us, the poor.*

Some "Echoes" from the Multi-Stakeholders: on the Paths towards Social Mobilization through the Promotion of Trust in the PLPP

The PLPP had worked through the consistent emphasis that had been put upon the importance of building partnerships with various stakeholders, including various government bodies and community-based organizations. The PLPP-supported program worked through strengthening links, with the emphasis on local governance. The sustainable livelihoods were driven by PLPP-led participation from various groups through village working groups. Support for local self-governance was also visible. In short, networks of alliances and collaboration were keys to the project implementation and performances.

On the paths towards social mobilization, trust is one among key ingredients of the true mobilization of human resources towards community-driven development. Trust would occur when parties holding certain relevant, favorable perceptions of another allow their relationships to lead to expected outcomes. Inherent in trust is the idea of risk and dependency. When the local communities were open up the PLPP, and vice versa, both PLPP teams and the local communities learnt to depend and stay interdependent upon each other for both anticipated and unanticipated risks. It could be stated that when low levels of trust persist, all parties involved might have difficulties communicating and cooperating, and the ultimate prospect for a true social mobilization and people empowerment towards CDD development diminished.

The Headmaster at Ban Palak, 34-year-old Vilaiwan Namthong spoke of the issue of trust and the role of trust in the PLPP. She commented:

> *We here at Ban Palak have 189 households. Most of the 600 people are Buddhists. With PLPP coming in, people have witnessed real changes. The villagers have seen how PLPP teach us to build the water irrigation, ponds and alternative agriculture or "Growing Economic Plants after Paddy Field Season" crops like asparagus, broccoli, beans, etc. . . . PLPP initiate[d] as well the price guarantee. The villagers now have a favorable perception of PLPP and put trust in PLPP. I personally believe that trust is an important foundation of society and trust is a key element that underpins social and economic relations. How the people perceive, in terms of intentions, capacities, and dependability of PLPP, is the key to sustainable development of trust; and of course, to the scale up of PLPP projects around the country.*

Rayrai Raksa, 49 years, The Mayor of Ban Yod District shared her perception of trust building and trust maintaining by PLPP on the reduction of 'perceived risks' in the traditional way of doing development:

> *I could say PLPP has supported the real social empowerment, development and maintenance of infrastructure. Bureaucratization has been minimized, which is very good. Other government bodies came in and exited. When the budget was all spent, that was the end. No money, no more new budget allocation, no sustainable development. We need to accept that villagers have different levels of brains. But PLPP are for real. They teach the villagers to know how to think, and to manage their lives, how to reduce the expenditure. PLPP recruited the local people who were born here at Nan. This is strategy: Nan for Nan.. We are proud to be the pilot province to run the PLPP. People and community are keys to success. We did this for us and for the King.*

Kanchana Yosalai, 45 years, Vice Mayor for Culture at the Municipality of Yod District, stated about the issue of trust and source credibility of PLPP:

> *PLPP have been so graceful. Villagers now have put high faith upon PLPP. At first, we did not understand why we ever need PLPP. But now, from things we have never known, never done socially and economically(e.g., like in agriculture development, community organization), now . . . we have been [made] fully aware. When we have meeting with PLPP teams, we coordinate by sharing good information and listening to what people want to say. We must stay open to listen to them. I believe that with good projects like PLPP, folk culture would be affected, modified and adaptive in a better way. Community life and folkways would be all improved. We must monitor things here continuously to make it our own way.*

Tib Jaimun, Head of Ban Yod, stated briefly, yet, reflected a history of positive experience with PLPP and information given to which the communities had already been exposed:

"Thanks to PLPP. We have high hopes in everything. Life now is easier and better."

Phumin Jaimun, Vice Municipal at Ban Yod, stated about the perceived trustworthiness, expertise, and dynamism of the PLPP teams:

All I could say is that the image of professionalism of PLPP is impressive to learn and to observe. I used to serve the country as Assistant to the Head Master of the village for 26 years, with PLPP coming in, So many new good things happen. Real income, the proportion living in poverty, and the community participation has been improved in an impressive way. We learn more to be self-reliant, and to love our communities. But we need to co-learn and be aware of disincentives. Once PLPP gone, we must not lose [the] incentives that have been initiated by PLPP.

Uthit Srisithipoj, 51 years, governmental Livestock at SongKwai district, shared his opinion on the performances of PLPP staff at Ban Yod. He specifically stated about the technical skills, knowledge and competence of PLPP reflecting trust:

Here at Ban Yod, we [are] always face[d] with the situations where a number of chickens died. When PLPP came in, PLPP would relieve my burdens. PLPP teaches and builds the [livestock] team here. Some rules are set; for example, no purchase of the pork from elsewhere. PLPP then teaches the local people to breed, the raise the animals in the hygienic ways. Now the villagers could consume proteins from animal meats. It also helps to reduce the cost of the meals from 40% to 10%. We raise the animals, we know how to take care of them. We eat them, so the costs of household expenditure [are] significantly reduced. PLPP livestock teams here, I could say, are very strong and skillful now. They also vaccinated the animals. What are the benefits of the communities, PLPP would attempt at best to make them happen for the sake of the targeted communities.

Eak Prompinij, 25 year-old village activist, PLPP livestock team at Ban Piang Sor, shared his views of the value of what the PLPP had brought to the village:

Not only [has] PLPP paid us for joining PLPP team, PLPP have taught us. . . . I'd rather call myself a 'Nan Volunteer'. We are local people and we want to learn and to solve problems here. This is sustainability. Every family must help one another to develop and make our little piece of land to be of value-added assets. We must learn to learn.

The Abbot at Wat Arunyawas, PhrakhruNunthakhun shared his profound belief in the role of religion in the social mobilization led by the PLPP. To him, religion reflected the deepest worldview of an individual. When people hold onto faith in their religion, they could transform those beliefs into trust in the related activities they engaged in the daily life situation, as far as those activities were not perceived as deviant or harmful to their religious beliefs. He stated:

> *Religion could play an important role. The monks could help to raise awareness and to support the conservation. But monks have no rights and no authority to command. The monks could only give away suggestions and advice. For instance, mentioning the six dimensions of natural resources preservation that PLPP have tried to maintain and improve. In relations to water, the monks play an important role in affecting people's beliefs. Like we perform the ritualistic acts based on Buddhism called 'Fate and Age Renewal of the Rivers', [in which] we teach people to be grateful to the water like the way we are grateful to a man. In terms of forests, the monks help by performing the Forest Ordination, like we ordain a man. So the people would learn to be grateful to the forest. In terms of soil, the monks tell the folks here to be grateful to the land. The soil is heavy and strong. The soil is so useful and we must not destroy or do damage to the land [on which] we stand.*

The PLPP: A New Spirit in the World of Development to Assist the Poor to Discover Their Own Potentials with Sustainability

Khun Tanakorn Rachtanonda was thus able to aver that the PLPP project had made the development process more community-driven, and inclusive of the interests of poor people and vulnerable groups. Community participation and institution-building at the grassroots with strategic communication as the central tool had been the essence of the PLPP approach to the project. With massive effort and attempts to weave sustainable community-drive development (CDD) into the institutional, social and community fabric, PLPP had formed and implemented projects that had run extraordinarily smoothly and successfully at Nan. The institution and infrastructure-building phases now all but completed, Khun Tanakorn believed that the PLPP at Nan offered a comprehensive, replicable, and scalable model that could be fully mainstreamed into Thailand's poverty reduction strategies.

Nevertheless, more needed to be learnt about the role of communication in participation since participation itself was both an end and a means, and needed to be viewed as such in the process of communication and outcome evaluation – whether it be capacity building, service delivery, or social mobilization. Hindrances and challenges would have to be scrutinized and learnt from. Even more critically, PLPP would need to move beyond the traditional aims of community development (i.e., the redistribution of power and incomes for rural people), to achieve a more holistic and sustainable approach to community development driven by the communities themselves. In this connection, Khun Tanakorn felt that the most important lesson that PLPP's first generation needed to pass on to the next was the strong

conviction that community development was a *grassroots* enterprise. It was important that it remain free of the abusive control of powerful local stakeholders, professionals and bureaucratic structures. Most importantly, PLPP needed to transform into the true learning organization with the philosophy and practice of multi-focal approach to CDD-based human development and participatory communication management. "PLPP", the abbreviation of '*Pid Thong Lhung Phra; to commit good deeds for common goods until the good results manifest themselves without ever proclaimed its tangible success*', then would achieve its missions and visions in the very years to come.

Addendum of Exhibits

<u>Exhibit 1</u>: The Mae Fah Luang: The Social Transformation Model for the 21ˢᵗ Century

The Doi Tung Development (DTDP) of the Mae Fah Luang Foundation (MFLF) has run on an approach called "SALD", or the Sustainable Alternative Livelihood Model that is a more holistic and integrated solution to rural development. It aims to rejuvenate nature and also empower the individual, while strengthening the community. Ensuring economic stability is in itself simply a means to a dignified and self-reliant livelihood. DTDP embodies the Princess Mother's beliefs in human goodness, potential, and dignity. The MFLF's development approach is human-centric in that it solves the problems at the fundamental level, aiming at meeting people's basic needs, opening windows to better and viable opportunities, and empowering them to realize their full potentials and dreams.

The DTDP is sequenced into 3 phases: Survival, Sufficiency, and Sustainability. In the survival stage, which takes about 1-2 years, it ensures that people have enough food to feed themselves and do not create more debt. The next stage is where local people learn how to make the best use of existing resources with appropriate knowledge and skills and work more productively to get rid of their debts, have their basic needs met; and become self-sufficient. This period takes 3-6 years. In the last 7-12 years, a sense of professionalism is fostered and a brand is created for local products to ensure the community's economic self-reliance and their ability to cope with global market forces. Local enterprises and local social organizations are encouraged and supported.

The MFLF focuses on human development through gradual empowerment and by tackling simultaneously three interconnected components: health, education, and livelihood. The model emphasizes the importance of people recognizing their worth and of economic self-sustainability. Once people are free of worries, programs are developed to instill a sense of social responsibility and to plant an intrinsic appreciation of environmental issues in people's hearts. Once this virtuous spiral (based on a balance among human wisdom, social well-being, environmental wellness, and economic prosperity) is formed, true Sustainable Development can be achieved.
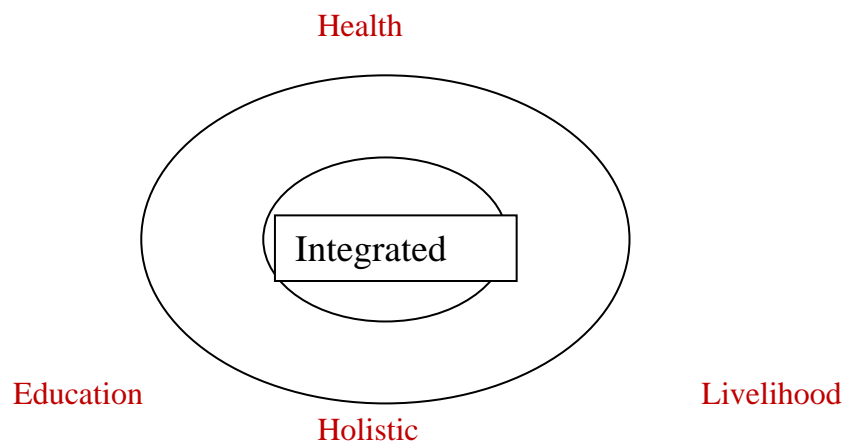
The Sustainable Alternative Livelihood Development Framework (SALD):

<u>Source</u>: The Mae Fah Luang Foundation under Royal Patronage, Sasin Journal of Management, 2010.

Exhibit 2: Community-Driven Development

According to the *Voices of the Poor Study* (Narayan and Others, 2000), based on interviews with 60,000 poor people in 60 countries, poor people demand a development process driven by their communities. When the poor were asked to indicate what might make the greatest difference in their lives, they responded: a) organizations of their own so they can negotiate with government, traders, and NGOs, b) direct assistance through community-driven programs so they can shape their own destinies, and, c) local ownership of funds, so they can end corruption. They want NGOs and governments to be accountable to them.

Community-Driven Devlopment (CDD) gives control of decisions and resources to community groups. CDD treats poor people as assets and partners in the development process, building on their institutions and resources. CDD is an effective mechanism for poverty reduction, complementing market, and state-run activities by achieving immediate and lasting results at the grassroots level. Experience has shown that CDD can enhance sustainability and make poverty reduction efforts more responsive to demand. CDD has also been shown to increase the efficiency and effectiveness of poverty reduction efforts. Because it works at the local level, CDD has the potential to occur simultaneously in a very large number of communities, thus achieving far-reaching poverty impact. Finally, well-designed CDD programs are inclusive of poor and vulnerable groups, build positive social capital, and give them greater voice both in their community and with government entities.

Support to CDD usually includes strengthening and financing inclusive community groups, facilitating community access to information, and promoting an enabling environment through policy and institutional reform. By its definition, CDD gives control of decisions and resources to community groups. These groups often work in partnership with demand-responsive support organizations and service providers, including elected local governments, the private sector, NGOs, and central government agencies. CDD is a way to provide social and infrastructure services, organize economic activity and resource management, empower poor people, improve governance, and enhance security of the poorest.

Support to CDD usually includes:

- Strengthening and financing accountable and inclusive community groups

- Forging functional links between community organizations and formal institutions and creating an enabling environment through appropriate policy and institutional reform, often including decentralization reform, promotion of a conducive legal and regulatory framework, development of sound sector policies and fostering of responsive sector institutions and private services providers.

- Facilitating community access to information through a variety of media, and increasingly through information technology

Moreover, CDD can improve the effectiveness and efficiency of services in many sectors and contexts. It is quite beneficial for infrastructure, education, microfinance, and natural resource management. Most importantly, the potential for CDD is greatest for goods and services that are small in scale and not complex and that require local cooperation, such as common pool goods (for example, management of common pasture and surface water irrigation systems), public goods (for example, local road maintenance), and civil goods (for example, public and advocacy and social monitoring).

Exhibit 3: Capacity (UNICEF, 1990)

A full definition of capacity development is the strengthening, enhancing, and nurturing a community's abilities to take control of its own destiny and to manage and direct its development process through an iterative process of assessment, analysis, and action. The Triple-A Process of assessing, analyzing, and continuously developing different elements of capacity is absolutely pivotal to effective CDD. Capacity assessment needs to focus on the types of capacity elements; e.g, resources, authority, responsibility/motivation/leadership/systems of assessment, analysis, and action. Detailed information of each type is as follows:

A full definition of capacity development is "the strengthening, enhancing, and nurturing a community's abilities to take control of its own destiny and to manage and direct its development process through an iterative process of assessment, analysis, and action." **(Unicef, 1990)**. The Triple-A Process of assessing, analyzing, and continuously developing different elements of capacity is absolutely pivotal to effective CDD. Capacity assessment needs to focus on the various types of capacity elements (e.g., resources, authority, responsibility/motivation/ leadership/systems of assessment), analysis, and action. Detailed information of each type is as follows:

a) Resources: human, financial, social/organization/ physical infrastructure/natural resources.

b) Authority: legal status of individual/organization in wider society, social/political legitimacy or credibility of the individual or organization, mandate established within organization or in wider fora, relationship to constituency—perceived relationship by individual/organization and by constituency, mechanisms of representation/feedback

c) Responsibility/Motivation/Leadership: clear responsibilities corresponding to key functions in relation to goal, incentives—salaries, indirect economic benefits, professional and social status or recognition, training or learning opportunities, personal encouragement, attitudes and values, leadership/direction, and strategic vision related to relative niche and credibility.

d) Systems of assessment, analysis, and control: for detecting and analyzing changes in the context and relevant response; for determining particular niche given mission and mandate; for planning action that corresponds to context and mission/mandate; for analyzing, documenting and improving one's own performance, including drawing lessons form one's own experience and that of others, existence of functioning feedback loop from action to reassessment, access and ownership of communication systems, and degree of participation in communication and connectivity of all relevant actors.
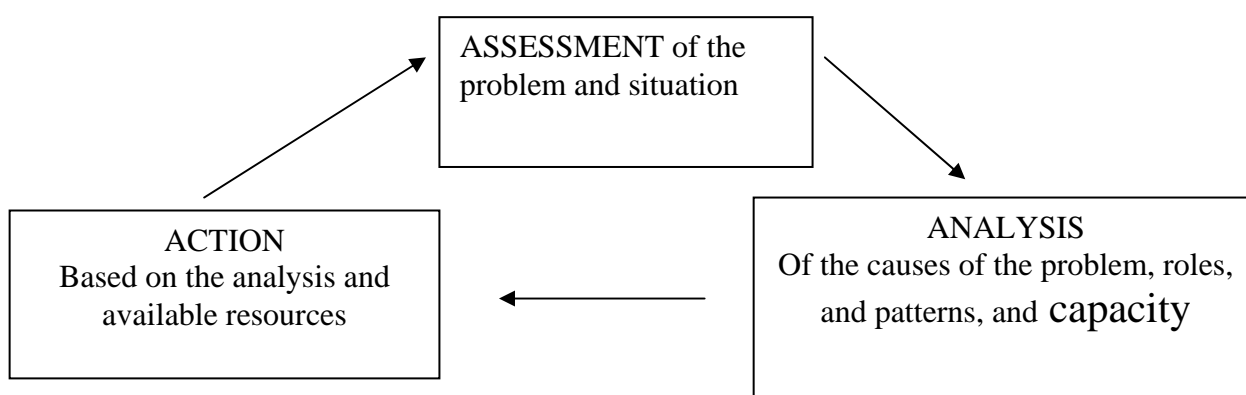
Source: A Triple-A Cycle, UNICEF, 1990

Exihibit 4: A Participatory Continuum

Participation is fundamental to CDD. Participation in community-based development depends on reversing control and accountability from central authorities to community organization. Successful design requires tapping into local needs, understanding and building on the strengths of existing institutions, and defining the changes needed in intermediary implementing agencies to support community action. With regard to CDD, participation is both a means and an end. But participation of whom, in what activities, and in what way relates to the different types of involvement of key actors within their projects, with regard to the distinctions shown in the table below.

Mode of Participation	Involvement of Local People	Relationship of research or action to local people
Cooption	Token representatives are chosen but with no real input or power	On local people
Compliance	Tasks are assigned with incentives: outsiders decide the agenda and direct the process	For local people
Consultation	Local opinions are asked; outsiders analyze and decide on the course of action	For/With local people
Cooperation	Local people work together with outsiders to determine local priorities; responsibility remains with outsiders for derecting the process	With local people
Co-learning	Local people and outsiders share knowledge and understanding to create new understanding and work together to form actions plans, with outsider facilitation.	With/By local people
Collective Action	Local people set their own agenda and mobilize to carry it out in the absence of outsider initiators and facilitators	By local people

Source: Cornwall, Levels of Participation, 1996

<u>References</u>

Anderson, B. (1982). The Imagined Community. London: Verso.

Argenti, P.A., Howell, R. A., & Beck, K. A. (2005). The strategic communication Imperative. Retrieved on December 16, 2008, from MIT Sloan Management Review Website http://sloanreview.mit.edu/the-magazine/articles/2005/spring/4613/the-strategic-com...

Barrett, D. J. (2002). Change communication: Using strategic employee communication to facilitate major change. Corporate Communications: An International Journal, 7 (4), pp. 219-231.

Binneman, D. (2004). Strategic communication objectives. Retrieved on December 16, 2008, from The Government of Barbados Website http://www.barbados.gov.bb/opsr/strategic_comm.htm

Binswanger, h., and S. Aiyar. 2003. Scaling up community driven development: Theretical underpinnings and program design implications. Draft. World Bank, Washigton, D.C.

Blankley, T., & Horn, O. (2008). Strategizing strategic communication. Retrieved on December 16, 2008, from Heritage Website http://www.heritage.org/research/nationalsecurity/wm1939.cfm

Bonk, K., Griggs, H., & Tynes, E. (1999). The ABCs of strategic communications. As discussed in The Jossey-Bass Guide to Strategic Communications for Nonprofits.

Corman, S. R., Trethewey, A., & Goodall, B. (2007). A 21st century model for communications in the global war of ideas: From simplistic influence to pragmatic complexity. Report #0701, Consortium for Strategic Communication, Arizona State University. Retrieved on June 11, 2008, from Consortium for Strategic Communication (CSC) Website http://comops.org/publications/csc_report_0701_pragmatic_complexity.pdf

Cornwall, A. (1996). Toward participatory practice: Participatory rural appraisal and the participatory process. In *Participatory research in health: Issues and experiences, ed.* K. de Konig and M. Martin. London: Zed books.

Garrett, J. 2004. *Community empowerment and scaling up in urban areas: The evolution of PUSH?PROSPECT in Zambia.* Food Consumption and Nutrition Division Discussion Pager 177. Washington, D.C: international Food Policy Research Institute.

Kauffman, L.A. (1990). The Anti-Politics of Identity, Social Review, Vol.21, no.1, pp.67-80.

Keller-Herzog, A. & Szabo, S., "Globalization and Development", Development Express No.8, CIDA, 1997.

Kodama, M. (2007). Innovation and Knowledge Creation through Leadership-based Strategic Community: Case Study on High-tech Company in Japan. Technovation, (27), pp.115-162.

Schein, E. H. (1997). Organizational Culture and Leadership. www.tnellen.com/tc/schein.html.

Stern R. Corman, & Jill S. Schiefelbein. (2006). Communication and Media Strategy in the Jihardi War of Ideas, Consortium for Strategic Communication, Arizona State University.

Schuftan, C. (1996). The community development dilemma: what is really empowering? Community Development Journal, *vol. 31 (3)*, pp. 260-264.

The Mae Fah Luang Foundation under royal patronage. (2010). The Mae Fah Luang: The social transformation model for the 21st century. Sasin Journal of Management, (*special edition*), pp. 64-75.

AGRICULTURAL BASED TO MANUFACTURING ORIENTED GROWTH: IN THE CASE OF THAILAND

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Abstract

In Thailand, agriculture has been the foundation for the rapid development of many industries, in the form of the raw materials, intermediate goods, and domestic food. Many industries in Thailand have to rely on the agricultural sector as a supplier of some important raw material. Also, most manufacturing workers are from rural areas and many of these workers work in manufacturing when it is not the harvest period. By the nature of the prevailing medium-sized industries and labor-intensive industries, many manufacturing firms are still dependent on the agricultural sector. Nevertheless, the policy over the past decades in Thailand has been to promote the manufacturing sector and lessen the importance of the agricultural sector. One might question why the government decided to do so? And what have we learned from Thailand's experience? As well, what did the data present some learning experience during Thailand major financial crisis?

Such understandings of the phenomenon of this case study developing from the real experience of the Thai economy are beneficial for studying the changes of Thailand's development and competitiveness position in the World market, the changes of Thailand's agricultural and manufacturing proportions, and policies manipulation. Some aspects are also worth discussing, leave for analysts to brainstorm in class like basic understandings to how each economic sector has been affected, like agricultural, manufacturing, services sectors, in terms of firms, producers, and consumers. As well, some discussions are about economic stability aspects.

Key Words: Economics Development, Agriculture, Manufacture, Thailand

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On Aug 23, 2011, Thai Prime Minister Yingluck Shinawatra delivered her government's policy statement to the Parliament, the joint sitting of the senators and members of House of Representatives, pledging to run the country with honesty and efficiency to reunite the country and bring happiness back to the Thai people. The prime minister classified the policies into urgent policies which need to be implemented in the first year, included national reconciliation and the restoration of democracy, as well as rehabilitation plan for those of all parties who have been affected in several years of political divisiveness. The urgent policies also included the drugs problem as a national agenda concern, along with an integrated water management plan to prevent and manage flooding, restoring relations with neighbouring countries, reducing income tax for juristic persons and improvement of the public's quality of life through, for example, wage increases and debt suspension for farmers.

For the four-year plan, Ms Yingluck focused on national security including reverence for and protection of the monarchy and the country's defence system, the transparency and efficiency of the country's administration, improvement of social conditions and quality of life, policies regarding lands and natural resources and environmental management. Ms Yingluck also pledged to Parliament that her government would run the country transparently and efficiency so that the country will be able to compete with other countries and that peace and happiness be restored to the Thai people.

Meanwhile, some scholars commented that the government's policy statement still failed to enhance Thailand's industrial and agricultural competitiveness, which is a primary selling point of the country. By the fact that Thailand has been developed by several decades of national development plans, the first of which began in 1961. As an economic advisor to the government, Miss Jaidee Ruksa-ngob receives an assignment on the issue of economic sectors strengthening. She needs to study the importance of each economic sector; mainly, manufacturing and agricultural sectors, and link them to the economic theory and some development in national plans, then advises to the government for the policy direction. She starts with agriculture and manufacturing development interrelations.

1.   Agriculture and Manufacturing Development Interrelations

Hirschman (1958) stated that "agriculture certainly stands convicted on the count of its lack of direct stimulus to the setting up of new activities through linkage effects—the superiority of manufacturing in this respect is crushing." In their classic work, Johnston and Mellor (1961) outlined five roles that agriculture should play in economic development: increasing the supply of food for domestic consumption, releasing labor for industrial employment, enlarging the size of the market for industrial output, increasing the supply of domestic savings, and earning foreign exchange.

The view that agriculture is interrelated with industry was also posited in Schultz (1953), Jorgenson (1961), and Nicols (1963). The importance of agriculture was emphasized by Timmer (1988), who wrote,

"The sheer size of agriculture in most poor countries' economies, with over 50 percent of national output and up to 80 percent of the labor force in agricultural activities, distinguished the sector from all others in the early stages of development. When directly related input and output industries and marketing activities are included, 'agribusiness' seldom declines to less than 20 percent of any country's economy. Hence the sector remains the largest single 'industry' in absolute size even in rich countries."

This case study examines agriculture and manufacturing sectors in the development of the Thai economy. Thailand's economy was almost completely agriculture-based, at least until the economic reforms of the 1960s. During the 1950s, Thailand's three major exports were agricultural products: rice, teak, and rubber. In 1960, the agricultural sector accounted for 40% of Thailand's GDP and employed the majority of the Thai work force[2]. At the time, many of the nation's manufacturing facilities were involved in processing agricultural products. Sawmills, rice mills, ice factories, tobacco-curing plants, sugar-processing facilities, and canneries employed large numbers of people. In this regard, it is perhaps not an overstatement that agriculture played an extremely significant role in the Thai economy and could be considered the primary force driving the economy during those years.

Today, Thailand's major manufactured exports include cement, heavy machinery, chemicals, pharmaceutical supplies, iron and steel products, electrical components, and computer chips. This jump in manufacturing concerns has also led to growth in the service sector of the economy and has narrowed the Thai trade deficit. As of the twenty century, Thailand's manufacturing sector continues to grow[3] and can be considered the fastest growing economic sector. At the same time, however, Thailand is still the world's leading exporter of rice and tapioca, and is a major producer of canned pineapples, frozen shrimp, sugar, and natural rubber, as well as a multitude of other fresh fruits and vegetables.

2. Development of the country during the national plans (1961-1986)[4]

Thailand has been developed by three decades of national development plans, the first of which began in 1961. External political pressure, the need to rebuild the country after the Second World War, and the demand for the elimination of inequality in income between urban and rural sectors, are the major factors that have influenced the development effort.

The first National Plan resulted in tremendous changes in the country's infrastructure, including improved transportation, roads, and railways, and a rise in the number of educated persons. Income generation was also a primary focus. The figures given in **Exhibit 1** suggest,

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[2] Still, in 2000s, around 55% of the labor force of Thailand was engaged in agriculture, with only 14% in manufacturing. The large agricultural sector makes labor market data less relevant from a macroeconomic perspective than corresponding data in industrialized countries.

3 The growth of the economy has also led to an increase in the standard of living of the average Thai. Average per capita income has risen from about 4,000 baht in 1970 to 53,215 baht in 1993 (25 baht = 1 U.S. dollar). In addition, the number of Thais living in poverty has been halved since the early 1960s.

[4] The content of this part refers to the United Nations Database.

at first sight, that the country has developed positively with regard to education, the economy, and technology.

In the initial stage of national development, agriculture was emphasized with a view to meeting both domestic and export needs. As early as the sixteenth century, the export of agricultural commodities occurred as a result of foreign influence, which changed the economic and production structure of the country. The demands of the external market expanded the area under cultivation. But this extensive growth resulted in a great loss of forest resources (see **Exhibit 1**). However, one should note that even in 1985 the majority of the population was still living in rural areas; the increase in production occurred essentially through the exploitation of traditional technologies.

The first National Economic Development Plan (1961-1966) focused primarily on developing agriculture to meet world market demands. The import substitution industry was also a central concern. During this period of transformation, the government helped provide the necessary infrastructure and develop technical skills, while the private sector was urged to participate in production under the close guidance of the government.

Replicating or buying appropriate technology was not considered. In agriculture, although foreign technologies had some influence, the majority of farmers still used indigenous technologies. However, the output of agricultural products increased satisfactorily, as a result of extensive cultivation.

In the second National Economic and Social Development Plan (1967-1971), the basic roles of government and private sector remained unchanged. The government continued to construct physical infrastructures, such as roads, railways, and irrigation dams, as well as providing the rural community with important health services. The private sector, on the other hand, was being continuously urged to put more effort into the production of industrial goods. The government continued sending students abroad and the purchase of technological items continued. There was a continued neglect of mechanisms for selecting and controlling foreign technology.

Within the agricultural sector, an increased use of modern production technologies, in the form of chemical fertilizers, pesticides, and small farm machinery, was pursued. Most of these, however, were imported. Although agricultural production increased tremendously, it did not keep pace with the increased production costs. (That is the percentage change in higher production output is less than the percentage change in higher total cost)

As a consequence of the second National Plan, certain undesirable phenomena emerged. These included a higher unemployment rate, a higher migration rate, and water pollution resulting from the drainage into waterways of chemical residues and waste materials from manufacturing. The government responded in the third National Economic and Social Development Plan (1972-1976) by imposing regulations and codes. Other measures taken were the expansion of compulsory education to neglected rural areas and an improvement in the quality of, and opportunities for, higher education. It was expected that the demand for higher technical skills would increase. Local physical structures, such as

roads, local health care, and rural development projects, were also emphasized during the third Plan.

Because of the package of policy measures adopted by the state during this period, industrial production was increasing at a high rate. Many of these products, particularly textiles, were mainly for local consumption. However, the industrialization of Thailand still had a number of barriers to breach.

The first of these was the continuous import both of foreign technologies for local manufacture and of materials, particularly iron-based materials, for industrial products (see **Exhibit 2**). This led not only to a serious trade deficit but also to a reliance on foreign support for industrial development. The government increased the number of science and technology degree-holders, but most of these were mainly engaged in industrial management, process operation and maintenance, and product control sections. Another problem was the lack of selection in technology, which denied technologists a chance to improve their capabilities in order to progress to the replication and innovation stages of technological development.

During the fifteen-year period, 1966-1980, rice output increased by 19%, but the area under rice cultivation increased by 47%.

Similarly, during the six-year period, 1974-1979, the gross amount of maize produced increased by 50%, while the cultivated area increased by 61%. This undesirable trend occurred at a time when the government was promoting the extensive use of modern production technologies, such as chemical fertilizers, pesticides, improved seed varieties, and improved techniques. The more the government emphasized the use of such technologies, the higher the total cost of production became for farmers[5].

By the fourth National Economic and Social Development Plan (1977-1981), industry was able to produce enough to meet domestic consumption needs. The government had invested considerably in the construction of the basic physical infrastructure for future industrialization. In a policy shift, it now established a policy of exporting industrial products. This also implied a shift of emphasis from agricultural exports to the industrial sector.

The policy, which gave effective economic incentives to entrepreneurs, was successful in yielding higher GDP rates. Yet the government had no concrete policy for developing technology on a self-reliant basis. The country continued importing foreign hardware technologies and iron-based materials for industrial purposes, increasing the trade deficit. Science and technology-trained manpower was still engaged primarily in machine

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[5] However, government believes that this increment in the total cost and also average cost will happen in the short-run, and will gradually be better in the long-run when comparing the higher benefit from such technologies. Nevertheless, some critiques are that how long is considered to be the so called "short-run" and "long-run". Also, the benefit should be higher than the cost occurs, at every marginal unit (when including the benefit in the future and calculating it back to the present value) to make sense employing this technology. If this is still something in the far future, then nobody will be certain about this total benefit. Hence, it is subjected to expectation. Farmers were motivated by the government's campaigns providing some motivations such as the production loan and so on for the groups who use modern technologies, for instance.

operation and maintenance. But, for the government, technology screening was not important as long as the country benefited from the exported products. In the agricultural sector, although production rose, the problem of the high cost of production was not addressed and farmers suffered.

During the fifth National Economic and Social Development Plan (1982-1986), the government continued its policy of industrial promotion for exports. This policy was reinforced by the discovery of petroleum. The policy for agricultural development also remained the same as in the preceding Plan. Experience with the Plan indicates that the poor structure of science and technology development had not been sufficiently remedied.

Since the first National Economic Development Plan initiated in 1961, the country has followed a consistent policy of purchasing foreign technologies, particularly hard industrial technologies and iron-based materials. The agriculture sector, in contrast, has been able to generate its own indigenous techniques for agriculture. However, some modern production inputs in agriculture have been continually imported. These factors indicate not only a heavy trade deficit but also a lack of interest in developing one's own technology.

The Eighth Plan (1997-2001) was an important turning point in the country's development planning. The plan represented new values and thinking in Thai society that gave importance to participation by all elements of society, and that aimed for 'people centered development,' deploying economics as a tool to help people achieve greater happiness and a better quality of life. The plan switched from a segmented approach to a holistic and integrated approach, in order to create a balance in the development of the economy, society, and environment. However, in the first year of the plan, Thailand experienced a severe economic crisis with great impact on individuals and society, including problems of increased employment and poverty. Restoring economic stability and reducing the impact of the crisis thus became a priority.

The Ninth Plan (2002-2006) adopted the Sufficiency Economy philosophy to guide the development and administration of the country, at the same time as continuing the holistic approach to people-centered development from the Eighth Plan. The plan prioritized solutions to problems arising from the economic crisis in order to build an economy with strong internal foundations and resilience to external changes, while aiming for balanced development with respect to people, society, economy, and environment in order to achieve sustainable development and the well-being of the Thai people. The national economy grew steadily at an average of 5.7 per cent a year. The stability of the economy improved. Poverty fell, while the quality of life of people improved greatly as a result of expansion of health services, better health insurance in both quality and quantity covering a majority of the population, and a decline in drug problems. But the Thai economy remains vulnerable to external instabilities, while problems persist over poverty, income distribution, quality of education, security of life and property, and transparency in government administration. These remain priorities for solution.

During the period of the Tenth Plan (2007-2011) Thailand faces major changes in many contexts that present both opportunities and constraints for national development. Both people and systems must be fully prepared to adapt to future changes and reap benefit by keeping up with globalization and building resilience in all sectors.

Now, Miss Jaidee has also found some policy distortion experience in the Thailand's history as follows.

3. An Example of Government Policy Distortion on Agriculture

As noted earlier, Thailand is one of the world's major rice exporters, and rice is one of the most important food crops in terms of planted area and value of production. Nevertheless, the government policy on rice production serves as an example of how agriculture has been victimized.

Taxes[6] and subsidies are good indicators, among government policy instruments, to show the direction of policy favor. Directly after WWII, taxes on rice exports accounted for a large portion of the country's fiscal budget. In 1953, they comprised 32% of the government's revenue but declined steadily to 7% by 1969, as other sources of revenue grew in importance (Panayotou 1989:68). During the early stages of the authoritarian politics, the priorities of the rice pricing policy was to collect tax revenue and ensure that consumer prices for the urban elite were neither too high nor too volatile. Rice price stabilization involved the imposition of export taxes and quantitative controls at the border, which were adjusted to keep domestic prices below the world price. In the 1980s, a number of studies noted this price stabilization (Ammar and Suthad 1986, Panayotou 1989). Moreover, a range of taxes were imposed to counterbalance the world price fluctuations. For example, a tax known as a "rice premium" was collected by the Ministry of Commerce. This was the heaviest of the export taxes and was usually adjusted in response to global market conditions. Second, the Ministry of Finance collected a separate flat 5% export duty. Third, there was a rice reserve requirement, where exporters were obligated to sell a varying amount of rice to the government below market prices for every ton of rice exported. Collected by the Ministry of Commerce, this device was considered an effective stabilization instrument to subsidize Bangkok's consumers. Finally, all exports were required to be licensed, which assisted the Ministry of Commerce in imposing quotas on exports.

Next, Miss Jaidee also would like to check about the experience of Thailand's financial crisis as well. Therefore, some empirical tests should be on the characteristics of agricultural sector and manufacturing sectors during Thailand's financial crisis.

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[6] Here, taxes were levied when the economy was in the fixed exchange rate regime.   Hence, the over-valued or under-valued currency may be embodied in the relative price value.   Note that this currency effect would occur to all across traded sectors in the country, and should not have a specific effect on some particular traded sectors.

4.   Agricultural Sector and Manufacturing Sectors during Thailand's Financial Crisis

Overall, according to the real data, Thailand had a high growth rate—above 8 percen**t** annually in the 1990s. This was due to an influx of foreign capital, which occurred through portfolio investment, foreign direct investment, and foreign debt. The balance of payment was a surplus during this time. The high 1990's GDP growth suddenly dropped in 1997, when the economic crisis occurred. The crisis and its causes have been widely discussed and debated by economists (for example, see Krueger A. (2002), Barro R. (2001), Scott D. (2002), Hernandez and Montiel (2001)).

One often cited reason is that the economy's growth was generally too high, a dangerous departure from the steady state. The economic boom, then, was just illusory, a temporary occurrence. This over-heated growth period can be explained, in part, by examining growth in the individual sectors. As pictured in **Exhibit 3** (lower panel), both manufacturing and service sectors made direct contributions to this extra-ordinary growth in GDP, whereas agriculture was the only sector that stayed approximately on the steady-state trend during 1992-1995. In fact, it was lower than the trend during 1995-1999. In this way, agriculture acted as a cushion to slow down the economic over-heating.

The study of individual sectors within the economy helps in this regard. If they covariate positively (i.e., all sectors in the economy fluctuate in the same direction), the seasonal pattern of agriculture is very beneficial and provides key information about the departure from growth fundamentals. If they covariate negatively, the study still provides information on regular shocks that can be anticipated.   **Exhibit 4** shows the three sectors' activities versus GDP on a quarterly7 (million baht) basis.

In addition, worth noting is the number of people employed by each sector of production. The service sector led the way, with manufacturing and agriculture coming in second and third, respectively. However, the sector that employs the largest proportion of the labor force market is agriculture. This implies that, in recent years, a large number of people, and the largest proportion of labor force, are still employed in the agricultural sector. This demonstrates the importance of agriculture as a major labor employer in the Thai economy.

Exhibit 5 compares the production output by sector against the amount of labor employed. Since the levels of output in all three sectors are higher, both manufacturing and service overall employ more labor.   The agricultural sector, by contrast, employs less workers, due to seasonal patterns. It implies that labor is being pulled from agriculture due to more attractive opportunities in other sectors of the economy.   This transition out of agriculture raises the productivity of the remaining labor in agriculture.   Thus, a higher productivity in the labor of agriculture is implied.

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[7] The first year of quarterly data available is 1993.

5. More on Empirical Findings

This section focuses on discerning the underlying and fundamental trends of the sectoral time series and, as deviations from the trend, the idiosyncratic shocks. For this purpose, **Exhibit 6** shows the three sectors' activities versus quarterly GDP in normalized[8] units. Here, the quarterly data show a unique pattern for agricultural agriculture in comparison to the annual data.

After the detrending[9], **Exhibit 7-8** below show that the manufacturing and service sectors move together in the same direction. Notice that, even during the crisis period, 1997-1999, there is still a co-movement between the cyclical components of the manufacturing and service sectors.

These figures emphasize, again, that the agricultural sector is unique and has its own cyclical component. Although the cyclical components of manufacturing and service move together, it is still a challenge to capture their cyclical pattern. This result is expected when the deviation from the growth path is caused by idiosyncratic shocks.

After she already has information on Thailand's experience, national plans and some empirical tests for financial crisis experience. She has got some ideas on the policy direction to advise the government. Last but not least, Miss Jaidee needs to crosscheck with a review for some theoretical backgrounds as well.

6. Review of Some Theoretical Background

In Two-Sector Growth Model, the relationship between industry and agriculture is given primacy. The history of this approach dates back two centuries. The seminal developments and modern applications are discussed below.

a) Classical Model: David Ricardo, "The Principles of Political Economy and Taxation", 1817. Ricardo's two main assumptions are, first, that all production processes have a tendency towards diminishing returns, and this diminishing is more rapid in agriculture, due to the limited of supply of land. Second, labor surplus in agricultural sector (disguised unemployment) causes an accumulation of capital that is, for Ricardo, a fundamental source of growth. In addition, the diminishing returns to increments of labor and capital, as well as an inelastic supply of land, generate a constraint to the economic growth. However, empirical studies for many developed countries show that technical progress in agriculture actually helps relax the constraints of the inelastic supply of land, which contradicts Ricardo's views as to the growth restriction.

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[8] As a deviation around its mean.
[9] Refer to Chinprateep, A. Other possible detrending procedures include: census x-11 methods, exponential smoothing, double smoothing, and Holt-Winters. There are, recently, other techniques (e.g., band-pass filter) have been used to give a result for comparison.

b) Import Substitution Model: R. Prebisch (1950) Prebisch proposed the idea of import substitution. In import substitution, a country develops its consumer good industries, which, normally, are mostly imported, and puts a tax on imports of industrial goods to encourage the development of local industry. The relative price of agricultural product (primary goods) should evolve downwardly so that the resources of LDC shift from agriculture to industry as quickly as possible. In this model, the role of agriculture is intentionally ignored.   Moreover, this strategy encourages capital-intensive investments without a consideration of the factor abundance of the country. As a result, it might not be the most appropriate strategy for countries with a labor surplus.   Likewise, import substitution in consumer goods has also been criticized as simply nonessential goods production[10].

c) Dual Economy Model (Dynamic Dualism) Fei and Ranis, in "Development of the Labor Supply Economy" (1964), studied two sectors of the economy, the large, stagnant, subsistence agricultural sector and the small-but-growing commercialized industrial sector. They believed in a shift in development from agriculture to industry and a reallocation of the labor force from the agricultural to the industrial sector. In the Fei-Ranis model, a subsistence sector is characterized by disguised unemployment and underemployment; a positive "institutionally determined"[11] wage rate for agricultural labor, which approximates the average productivity of labor in the subsistence sector; a marginal productivity of labor lower than the wage rate; and fixed land inputs.   Under these conditions, it is possible to transfer labor from the subsistence sector to the commercial-industrial sector without reducing agricultural output and without increasing the wage rate of the labor supply to the industrial sector during the early stages of development. Their model considered agriculture only as a supporting sector to help the development of the industrial sector. The modernization of the traditional agricultural sector was ignored. In addition, the model has been criticized as being ignorant of the role of market force.

d) Balanced Growth (Neoclassical) Model: Johnston and Mellor, T. Shultz The balanced growth model proposed that agricultural resource owners are efficient and returns can be greatly improved with new agricultural technology and some institutional reform. Therefore, the public resources should be invested in increasing agricultural productivity.

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[10] As mentioned in a lot of leading literatures, "infant" industry has still never grown up over time. The government needs to have many measures to distort the market by pampering some specific, unfruitful industries. It is, hence, considered a inefficient allocation of resources. One might refer to the "New Trade Theory".

[11] The institutional forces (not market forces) determine the agricultural wages.

e) Endogenous Growth Model and New Development Model (NDM): Paul M. Romer   Permanent changes in conventional government policies have permanent effects on an economy's long-run growth rate. By assuming that public and private investments in human capital generate external economies[12] and productivity improvements offset the natural tendency for diminishing returns, the endogenous growth model seeks to explain the existence of increasing returns to scale and the divergent long-term growth patterns among countries. In Romer's model, the source of technological change is explained endogenously. The model emphasizes human capital accumulation as a key source of growth, instead of exogenous technical innovation. The per capita income level depends on the economy's initial human and physical capital endowments, and human capital's endowments explain the diversity of the growth rates in the world. Other noteworthy authors, within this approach, include Hirschman(1958), Baldwin(1966), and Lewis(1954). They were the first modern economists to emphasize the importance of the agricultural sector. In particular, W. Arthur Lewis was a pioneer of the modern version of the two-sector labor-surplus model. Like Ricardo before him, Lewis concentrated on the implication of surplus labor for the distribution of income.

Moreover, there is Economic Modeling. In response to the fact that there are too many parameters in most macro models, computable general equilibrium (CGE) has been developed to estimate them in a disaggregated model environment. In CGE, modelers apply econometrics and national income accounting identity to obtain an average measure of a parameter of interest.   The simulations are confined to macroeconomic variables and the comparisons are between variances and co-variances.   Static equilibrium analysis was developed to calculate the impact of various economic policies, as seen in the early work of Harberger (1962, 1964). Such analyses, at the time, were generally limited to a few sectors, until the advent of the more complicated CGE models in the early 1970s. The more complicated models include many sectors or more sophisticated policy analysis. Historically, aggregate economic growth analysis can be traced back to the work of early theorists such as Ramsey (1928), Solow (1956), and Koopmans (1965). Dynamic extensions of CGE models are developed.

7.   Closing section

Many important dimensions of change at the global level will affect Thailand greatly as both opportunities and constraints for development. The five major trends of such change are economic groupings and changes in global financial markets, leapfrog advances in technologies, social changes, movement of peoples, changes in the environment and natural resources. Meanwhile, some scholars commented that the government's policy statement still failed to enhance Thailand's industrial and agricultural competitiveness, which is a primary selling point of the country.

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[12] Externalities as a source of market failure: external economy and external diseconomy happen if the externalities are beneficial or detrimental, respectively.

After all, as an economic advisor to the government, Miss Jaidee Ruksa-ngob receives an assignment on the issue of economic sectors strengthening. She needs to study the importance of each economic sector; mainly, manufacturing and agricultural sectors, and link them to the economic theory and some development in national plans, then advises to the government for the policy direction. She starts with agriculture and manufacturing development interrelations, and then the fact that Thailand has been developed by several decades of national development plans. Miss Jaidee has also found some policy distortion experience in the Thailand's history and some empirical tests on the characteristics of agricultural sector and manufacturing sectors during Thailand's financial crisis. Last but not least, Miss Jaidee has already crosschecked with a review for some theoretical backgrounds as well.

Now, she plans to study more in details about the growth model and to help more understanding the Thai economic situation and level of development and has some more testing on some empirical data. Coming in her mind, some alternatives on setting policy measures/directions are:

First direction: guidelines for major investment following the development strategies so that development partners may implement within their area of responsibility, and draw on cooperation from various sectors.

Second direction: under the concept of the reform of the structure of the economy, agricultural and manufacturing sectors need to re-evaluate the policy measures and revise to meet their productivity and avoid any other financial crises in the future.

Third direction: reduction of the capital cost of transport and logistics, investments to ensure equitable access to basic services, and energy security. These are some basic needs for developing all economic sectors.

Fourth direction: under the development of biodiversity and maintenance of the resource base and environment, emphasis will be placed on development of geographical information systems, development of water sources, prevention and alleviation of natural disasters.

Fifth direction: devise indicators of development outcome and systems for monitoring and evaluation of government administration will be upgraded and extended to assess implementation. This helps for early warning and measure the performance of each economic sector as time passes by.

What do you think about her ideas for policy directions, any more suggestions to Miss Jaidee for Thailand's government policy advice?

8. Appendix

The Tenth National Economic and Social Development Plan [13]

Situation of the country

In the context of changes that Thailand must face in the future, a review of the country's situation with respect to society, economy, environment and natural resources, and national administration shows that Thailand has the opportunity to adapt and reap benefits from globalization, but must still develop the structure of its society, economy, and politics in many aspects for the well-being of the Thai people. The important points of the country's situation may be summarized as follows.

1. Society

Thailand counts among countries with medium-level human development, and shows a trend of steady improvement. The human development index of Thailand in 2005 stood at 0.778, ranked 73rd among 177 countries, above China and Vietnam but below Japan, Republic of Korea, and Singapore. As for human development with respect to education, quantity has improved rapidly with the average years of schooling having increasing steadily to 8.5 in 2005, and 60 percent of the population having critical thinking skills. There are increased opportunities for life-long learning. However the capacity to adapt and apply knowledge is still at a low level. The quality of education is still inadequate for the transition to a knowledge-based economy and society. This is a matter of priority for the future. Even though the proportion of the Thai workforce with education above the primary level has increased to 39.8 per cent in 2005, the productive efficiency of Thai labor remains low in comparison with Malaysia, Republic of Korea, Singapore, Taiwan, and Japan. The workforce with medium and high education remains deficient in both quantity and quality. Investment in research and development remains at only 0.26 per cent of GDP, a seventh of the global average. The commercial application of knowledge is still at a low level, which is a weak point for Thailand in building knowledge, innovation, and research for development, and hinders improvement of international competitiveness. At the same time Thailand faces a crisis of values which is a result of the inflow of foreign culture through mass media and information technology with no filtering and selection of what is good, resulting in a decline of virtuousness and morality, especially among children and youth. As a result of changing lifestyles, the institutions of family, schooling, and religion have less role in raising, educating, imparting knowledge, and instilling ethical standards and values. As a result, values and behavior are increasingly marked by materialism and consumerism. Health insurance extends to 96.3 per cent of the population in 2005. Incidence of disease has fallen to 1,798.1 per thousand in 2004.

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[13] Source: Office of the National Economic Social and Development Board

However, there is a trend of steady increase in the numbers suffering from preventable diseases, including new and resurgent epidemic diseases, as a result of globalization. Social insurance still does not cover informal workers and the disadvantaged at all. Threats to the safety of life and property are on the increase. Thailand is in transition from a rural to an urban society. As a result of the compartmentalized development of urban and rural areas, there is imbalance in the development of rural communities. However, more community participation in development and better management of knowledge have resulted in communities uniting, collaborating, and learning together to cope with their own problems to some extent. At the same time, localities have become more capable of operating efficiently, and have mechanisms in place to take on duties under the scheme of administrative decentralization. Already 3,657 sub-districts have learnt how to compile community plans. Schemes are in place to support the work of community forums in compiling plans for districts and localities, to develop the capacity of community leaders, to create networks of community businesses, and to encourage participation in the creation of employment. Yet culture, values, and wisdom remain neglected, and are not being passed down to new generations.

Public consciousness, generosity and mutual assistance have begun to decline. However, distributed throughout the country there are around 1.7 million development leaders, including community leaders and keepers of local wisdom, who play important roles as the driving force in community development. As a result, in every region there are strong communities that can serve as examples to study and emulate. Yet, the behavior of people and relationships within communities are undergoing change under the impact of materialism, resulting in greater convenience but less contentment, income insufficient to cover expenses, growing debt, and more individualistic relations within the community.

2. National economy

The Thai economy grew at an average rate of 5.7 per cent over the period 2002–2005. Thailand counts among middle-income countries, ranked 20 out of 192 countries in terms of the economy's size. The country's position in international trade has remained stable, with constant market share and growing competitiveness. The development of the knowledge based economy has advanced. The strong point of the production structure is its diversity which reduces risks arising from fluctuations in the economic cycle. Stronger linkages among production sectors have increased value-added. However, the structural weakness of the Thai economy is its high import dependence for raw materials, components, energy, capital, and technology. As productivity is low, production relies on the resource base more than on knowledge. Wasteful usage of resources for production and consumption results in environmental problems and consequential social impacts because of the absence of appropriate preventive measures. The infrastructure of transport and logistics lack efficiency and systematic linkages, resulting in high capital cost of 16 per cent of GDP. Also the transportation sector absorbs as much as 38 per cent of commercial energy. In addition, the infrastructure for information technology and telecommunications, and for water supply and distribution, has not extended adequately into the rural areas. The infrastructure for science,

technology, and innovations are all at a low level, below that of neighboring countries that are trade competitors.

However, the Thai economy has achieved a good measure of stability as a result of recovery policies after the economic crisis. At the end of 2005, unemployment stood as 2 per cent, and international reserves at US$ 52.1 billion, considered adequate for resilience against external shocks. However the steep rise in oil prices since 2004 has resulted in increasing deficits in the balance of trade and the balance of payments, pointing up the structural weakness of excessive external dependence. In addition, savings are lower than investment, resulting in dependence on overseas capital, exposing the country to the risks of a balance-of-payments deficit and international capital movements. Hence it is necessary to increase the economy's resilience within the context of a world with free movement of people, technological knowledge, capital, goods, and services.

As for development towards a more fair economy and alleviation of poverty, the incidence of poverty has fallen steadily and the distribution of income has marginally improved. In 2007 there are 7.34 million people, 11.3 per cent of total population, still below a poverty line of 1,242 baht income per month. The Gini coefficient for income distribution improved slightly to 0.499 from 0.525 in 2000 and 0.501 in 2002. However, improvement in the distribution of income demands priority attention as Thailand still trails many countries in terms of equality.

3. Environment and natural resources

In the past, the environment and natural resources were principally used to meet the demand for economic growth. In 40 years, 67 million rai of forests were destroyed, and now forests cover only 33 per cent of the country, resulting in more frequent and more severe problems of flooding, drought, and natural disasters. Marine and coastal resources have deteriorated. Mangroves have declined from 2 million to 1.5 million rai. The seafood catch has been reduced to one third. The conditions of coral and sea grass have deteriorated. Biodiversity is rapidly being destroyed. Human activity that destroys the habitats of various living organisms is changing the ecology and increasing the incidence of extinction of species.

The main reasons for the decline in the quality of the environment are the increase in population and inappropriate lifestyles resulting in increased pollution. Air and water quality is below standard. The volumes of refuse and hazardous wastes are increasing faster than the capacity to dispose of them. Hazardous substances used in production are being imported in increasing volumes without adequate mechanisms for controlling production processes, storage, or transport. As a result, these substances have seeped into the environment, and contaminated the food chain. In addition to the complexities, deficiencies, and failures of implementation, the use of economic and legal measures has been limited.

4. Administration

The administration has begun to open up opportunities to other sectors to participate more in government, but the public still has a limited role. The political sector has become stronger and more stable, yet the administration of economy and society remains highly centralized, and the systems of checks-and-balances remain ineffective. The bureaucracy has been reformed and modernized for greater efficiency, but administrative processes remain rather closed and lack systems for popular participation. The appraisal of various aspects of bureaucratic reform has been positive, with an average score of 3.82 in 2004. The people's sector has begun to participate in development, and plays an increasing role both in politics and local development. The election turnout has steadily increased to 72.6 per cent in 2005. The private sector has a growing role in national development with more corporate governance. In the Institute for Management Development (IMD)'s rankings for good governance, Thailand advanced from 36th in 2001 to 30th in 2006, but still lacks the capacity to drive good governance in the private business sector in general, especially in unlisted firms. Government administration still lacks good governance because it remains centralized, and denies opportunities for popular participation in decision-making. Although there has been greater progress in decentralization, local government bodies are not yet strong and lack freedom to collect adequate revenue for self-reliance. In addition, judicial and legal systems have not adjusted in step with change and are unable to provide justice for all parties. Mechanisms for monitoring the use of state power remain inefficient. Private-sector checks-and-balances still have a limited role, and lack ability to build a network that collectively could monitor effectively. Though transparency in government administration shows a tendency to improve, and the rating by Transparency International rose to 3.8 out of 10 in 2005, this level remains rather low. The deep-seated patronage system remains an obstacle to the spread of good governance in Thailand. Coupled with a lack of quality and public consciousness, it results in an inability to separate individual benefit from public benefit, leading to more complex problems of injustice and corrupt practice.

Vision and Mission

Vision for Thailand

Thailand will be a *Green and Happiness Society* in which people have integrity and knowledge of world standard; families are warm; communities are strong; society is peaceful; economy is efficient, stable, and equitable; environment is of high quality and natural resources are sustainable; administration follows good governance under the system of democracy with the king as head of state; and the country is a respected member of the world community.

Mission

So that development under the Tenth Plan pursues a Green and Happiness Society under the direction of the Sufficiency Economy philosophy, the mission is determined as follows.

1. Develop people to have quality, integrity, knowledge of world standard, good health, living in warm families and strong communities, capable of self-reliance, pursuing their lives with security and dignity, within a balanced diversity of culture, natural resources, and the environment.

2. Enhance the economy to be efficient, stable, and equitable by reforming the structure of the economy to be competitive and self-immunized in the face of risks and fluctuations in the environment of the age of globalization, on a foundation of efficient management of the overall economy, a sufficient level of savings, reform of the structure of production and services on a basis of knowledge and innovation, using the strengths of biodiversity and Thai identity, along with overseas linkages, and development of infrastructure and logistics, energy, laws and regulations, and mechanisms to support competitiveness and a fair distribution of benefits

3. Conserve biodiversity, build a secure natural resource base, and conserve the quality of the environment by creating a sustainable balance between conservation and exploitation with fair distribution and value creation, supporting communities to have knowledge and self-immunity, safeguarding the resource base, protecting rights, enhancing the role of communities in the management of resources, and adjusting the pattern of production and consumption to be environment-friendly, while maintaining the national benefit from international agreements and obligation.

4. Develop national administration to achieve good governance under democracy with the king as head of state, by building mechanisms and regulations which promote distribution of benefits of development to all parties, ensuring transparency, honesty, justice and public responsibility, decentralizing power, and providing systems for all parties to participate in decision-making, to achieve fairness in economy, society, and the use of resources.

Principal Objectives and Targets

To be in line with changes that Thailand must make in future, and to progress towards the desired long-term vision, development in the five years of the Tenth Plan shall pursue the following principal objectives and targets.

Objectives

1. to provide opportunities for learning combined with integrity and morality by creating linkages between families, religious institutions, and educational institutions; to enhance health services, balancing among health care, promotion, prevention, treatment and capacity rehabilitation; and to improve the security of life and property.

2. to increase the potential of communities by linking them in networks to serve as the foundation for developing the economy and quality of life; to conserve, rehabilitate, and utilize the environment and natural resources in a sustainable fashion to achieve sufficiency and reduce poverty.

3. to reform the production structure for goods and services for value creation on a foundation of knowledge and innovation; to promote linkages among production sectors to increase value-added.

4. to build safety nets and risk management systems for the sectors of finance, banking, energy, factor markets, the labor market, and investment.

5. to ensure fair competition in trade and investment for national benefit; to create mechanisms for fair distribution of the benefits of development to all segments of the population.

6. to preserve natural resources and biodiversity, along with safeguarding the quality of the environment to be a secure foundation of national development and livelihood for both current and future generations; to create mechanisms to safeguard national benefit in a fair and sustainable manner.

7. to promote good governance in government administration, the private business sector, and the people's sector; to expand the role and capacity of local government bodies; to promote mechanisms and processes of participation in development; and to nurture a culture of democracy for peaceful coexistence.

Targets

To meet the above objectives, development targets for the Tenth Plan have been set as follows.

1. Targets for human development. Provide all persons with physical and mental development, knowledge, ability, career skills, and life security, and enable all target groups to develop their own potential and strengthen family, community, and society: increase average years of schooling to 10; raise the proportion of the qualified workforce with medium-level skills to 60 per cent; raise the proportion of R&D workers to 10-in-10,000; reduce the crime rate by 10 per cent; raise life expectancy to 80 years; reduce the trend of increase in the five leading preventable diseases namely heart disorders, high blood pressure, diabetes, stroke, and cancer, in order to increase labor productivity and reduce expenditure on personal health in the long run.

2. Targets for community development and alleviation of poverty. Ensure that every community has a participatory community plan, and that local government bodies integrate community plans with their budget management, anti-crime and anti-drug measure; increase access to capital and participation in decision-making; reduce those below the poverty line to 4 per cent by 2011.

3. Targets for the economy. Reform the economic structure for balance and sustainability by increasing the ratio of the domestic economy to international trade to 75 per cent within 2011; increase the proportion of agriculture and agro-industry in GDP to 15 per cent within 2011; maintain inflation at an average of 3.0–3.5 per cent a year; maintain the ratio of public debt to GDP no higher than 50 per cent; maintain average elasticity of energy consumption no higher than 1:1 during the period of the Tenth Plan; increase renewable energy to 8 per cent of total, and reduce the ratio of energy use to GDP, and in particular reduce the usage of petroleum in the transport sector to 30 per cent of total energy usage; ensure the income of the highest 20 per cent does not exceed that of the lowest 20 per cent by more than 10 times within 2011; ensure the production of small and medium enterprises is no lower than 40 per cent of GDP during the period of the Tenth Plan.

4. Targets for safeguarding natural resources and the environment. Conserve natural resources and biodiversity by maintaining forest at no less than 33 per cent of total land area, with conservation forest no less than 18 per cent of total land area; maintain at least 31 million rai of irrigated area for agriculture; enhance environmental quality appropriate for the quality of life and safety of the ecological system, by ensuring that the proportion of river basins and natural water sources where the water quality is rated as fair or good is not lower than 85 per cent; maintain air quality above standard, in particular with micro-particles (PM10) not exceeding 120 milligram per cubic meter on average across 24 hours; reduce the rate of carbon dioxide emissions per person by 5 per cent from the 2003level, that is no higher than 3.5 tonne per person per year; limit the production of waste in urban areas no higher than 1 kilogram per person per day; ensure proper disposal of at least 80 per cent of all hazardous waste from communities and industries; and establish a complete national biodiversity database.

5. Targets for good governance. Improve good governance to achieve a transparency score of 5.0 within 2011; trim the bureaucracy to appropriate size and increase value for money of operation by reducing the workforce of government officials by 10 percent within 2011; improve good governance in the private sector; enhance capacity of localities to collect revenue and become more self-reliant; strengthen the people's sector by improving knowledge of rights and duties and increasing participation in decision-making and responsibility in national administration; compile a larger body of knowledge about democracy and good governance in the Thai context within the period of the Tenth Plan.

Exhibit 1: Changes during national development plans (percentages)

Development sector	1961	1985	% change
Population			
Urban (%)	12.5 (1960)[a]	18.2 (1982)	+5 7[b]
Rural (%)	87.5 (1960)	81.8 (1982)	-5.7
Education			
People with basic education (%)	51.3 (1960)	82.4 (1980)	+ 31.1
People with higher education (%)	0.6 (1960)	2.3 (1980)	+ 1.7
Economy			
GNP at 1972 prices (millions of baht)		309,122 (1982)	
Per capita GNP at 1972 prices (baht)		6,375 (1982)	
GINI coefficient	0.5627 (1963)	0.6079 (1981)	4.52
Trade balance (market prices, in millions of baht)	-290 (1961)	- 69,984 (1984)	
Infrastructure			
Roads (km) (1983)		33,148	
Railways (km) (1983)		3,735	
Airways in distance flown (km) (1983)		54,644,936	
Schools (no. per capita) (%)	0.1(1961)	0.15(1981)	+0.1
Land resources			
Agricultural area (%)	21.29 (1961)	45.83 (1984)	+24.54
Forest area (%)	53.33 (1959)	30.55 (1982)	- 22.78

a Figure in parentheses refers to year the data were obtained.

b. + means a quantitative increment only, not an improved quality.

Exhibit 2: Expenses for imported steel and steel-based products (millions of baht)

Year	Non-electrical items for industry	Machinery and parts for agriculture	Tractors	Iron/steel	Other metals
1957	567	12	54	467	86
1962	1,232	19	133	479	147
1967	2,875	33	655	1,231	422
1972	4,706	36	345	2,046	1,043
1977	10,424	106	2,062	6,352	3,454
1982	19,329	164	1,679	11,323	5,811
1984	32,979	192	1,821	14,035	7,339

Exhibit 3: Real GDP VS Model (billion 1988 baht)

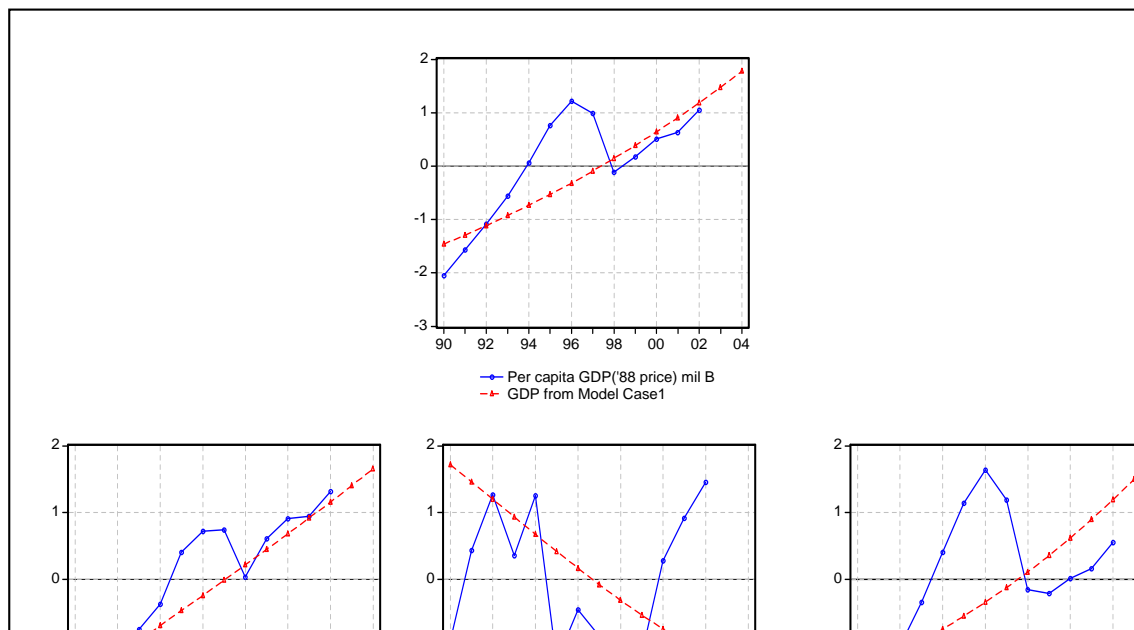**Exhibit 4: Three sectors' activities versus GDP on a quarterly basis**
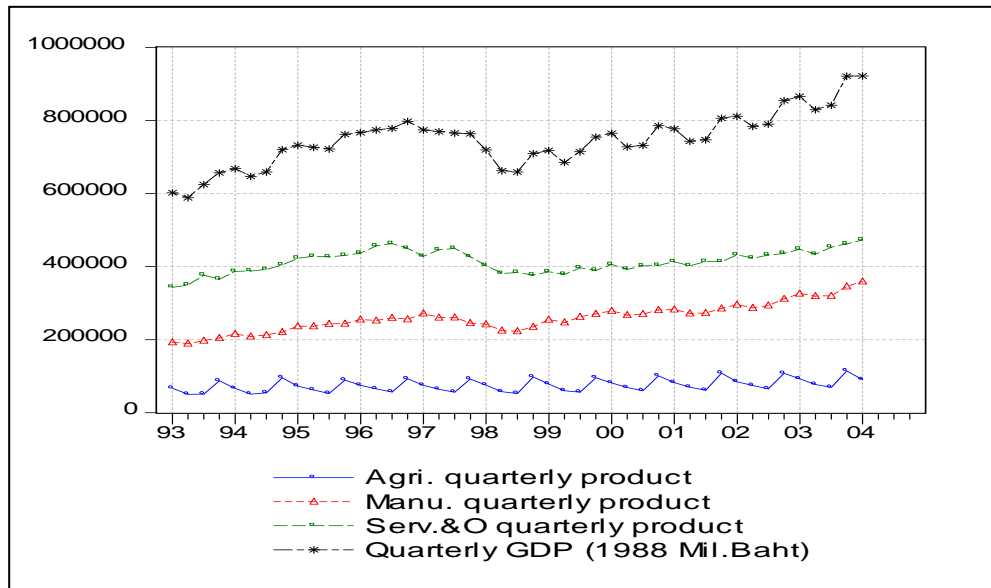

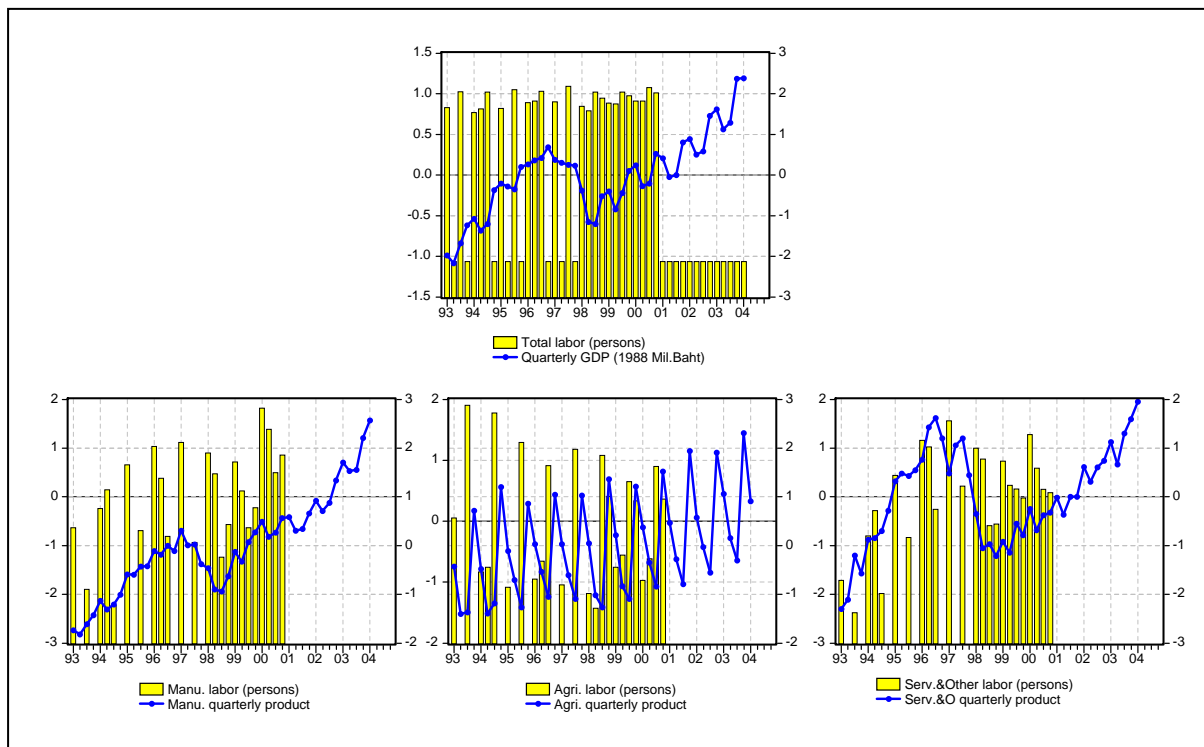**Exhibit 5: Number of labor employed vs. the production of each sector**

Exhibit 6: three sectors' activities versus quarterly GDP in normalized units
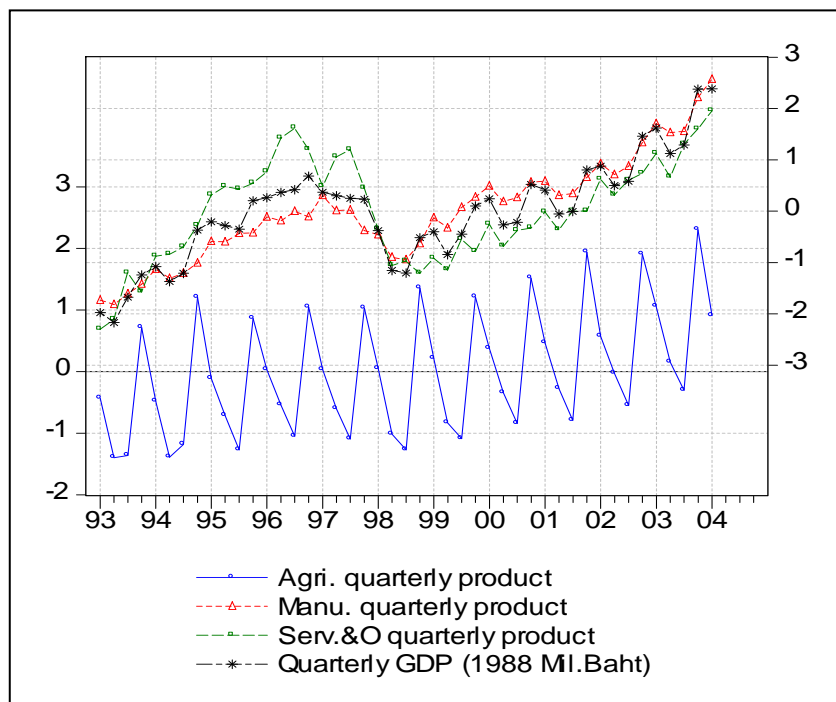

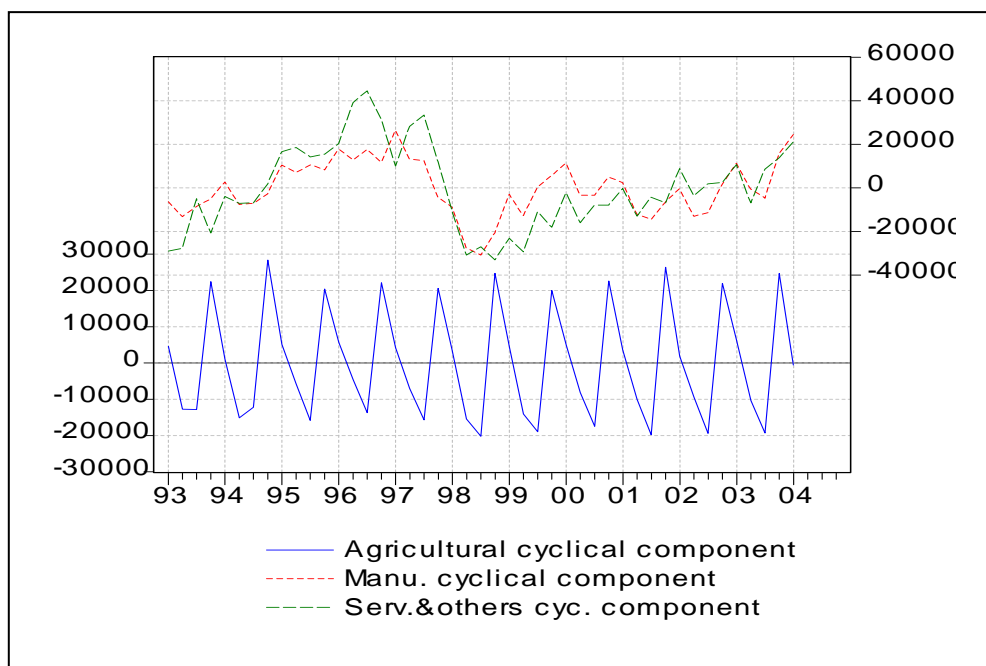**Exhibit 7: presents the cyclical components of all economic sectors**

Exhibit 8: presents the information of Exhibit 7 with a normalized scale.
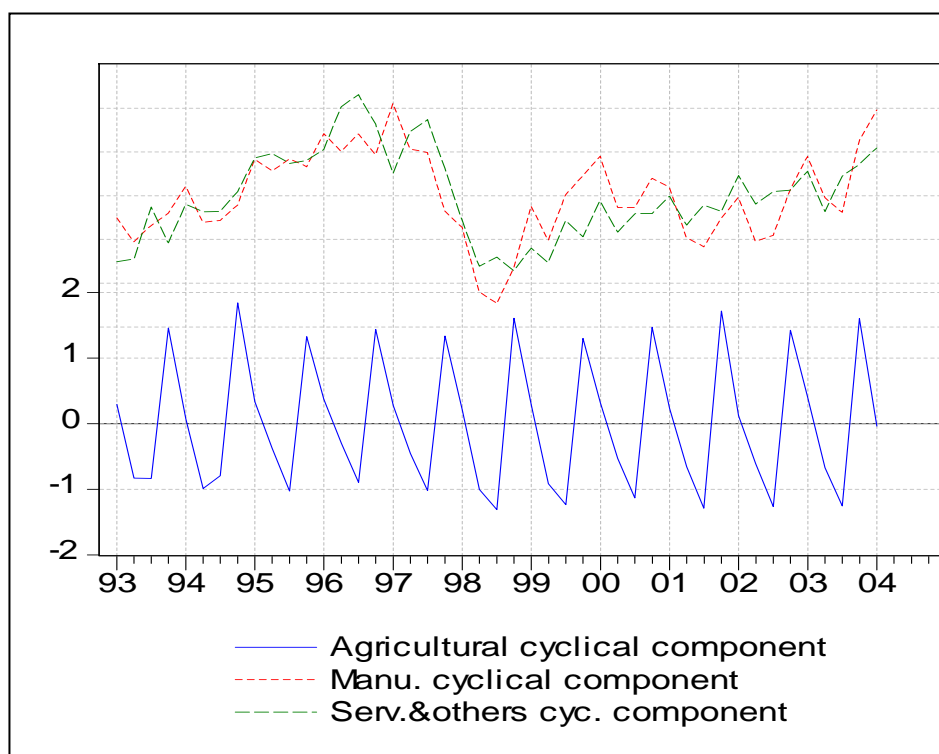
Exhibit 9: Gross National Product at Current Market Prices (Original)

Millions of Baht

	Agriculture	Non-Agriculture	Gross Domestic Product	Plus : Net Factor Income Payment from the Rest of the World	Gross National Product	Population (1,000 Heads)	Per capita GDP (Baht)	Per capita GNP (Baht)
1993	274,063	2,891,159	3,165,222	-45,929	3,119,293	58,010	54,563	53,772
Q1	68,534	687,020	755,554	-11,222	744,332	57,830	13,065	12,871
Q2	56,110	699,463	755,573	-17,635	737,938	58,010	13,025	12,721
Q3	58,725	752,393	811,118	-11,087	800,031	58,185	13,940	13,750
Q4	90,694	752,283	842,977	-5,985	836,992	58,360	14,444	14,342
1994	329,844	3,299,497	3,629,341	-55,791	3,573,550	58,713	61,815	60,865
Q1	74,956	811,147	886,103	-10,138	875,965	58,536	15,138	14,965
Q2	63,933	807,031	870,964	-17,496	853,468	58,713	14,834	14,536
Q3	71,685	825,151	896,836	-14,907	881,929	58,884	15,231	14,977
Q4	119,270	856,168	975,438	-13,250	962,188	59,056	16,517	16,293
1995	397,929	3,788,283	4,186,212	-68,202	4,118,010	59,401	70,474	69,326
Q1	106,932	926,923	1,033,855	-13,268	1,020,587	59,228	17,456	17,231
Q2	91,030	935,335	1,026,365	-22,611	1,003,754	59,401	17,279	16,898
Q3	77,118	955,739	1,032,857	-17,982	1,014,875	59,551	17,344	17,042
Q4	122,849	970,286	1,093,135	-14,341	1,078,794	59,701	18,310	18,070
1996	438,119	4,172,922	4,611,041	-102,084	4,508,957	60,003	76,847	75,146
Q1	108,988	1,007,564	1,116,552	-21,101	1,095,451	59,852	18,655	18,303
Q2	101,112	1,044,982	1,146,094	-34,727	1,111,367	60,003	19,101	18,522
Q3	86,574	1,067,700	1,154,274	-26,277	1,127,997	60,152	19,189	18,752
Q4	141,445	1,052,676	1,194,121	-19,979	1,174,142	60,302	19,802	19,471
1997	447,176	4,285,434	4,732,610	-123,375	4,609,235	60,602	78,093	76,057
Q1	107,400	1,050,684	1,158,084	-21,361	1,136,723	60,452	19,157	18,804
Q2	98,340	1,067,377	1,165,717	-37,655	1,128,062	60,602	19,236	18,614
Q3	89,031	1,092,990	1,182,021	-33,258	1,148,763	60,751	19,457	18,909
Q4	152,405	1,074,383	1,226,788	-31,101	1,195,687	60,901	20,144	19,633
1998	498,587	4,127,860	4,626,447	-160,044	4,466,403	61,201	75,594	72,979
Q1	132,472	1,078,356	1,210,828	-35,990	1,174,838	61,051	19,833	19,244
Q2	105,713	1,011,407	1,117,120	-48,312	1,068,808	61,201	18,253	17,464
Q3	93,043	1,019,016	1,112,059	-42,120	1,069,939	61,352	18,126	17,439
Q4	167,359	1,019,081	1,186,440	-33,622	1,152,818	61,503	19,291	18,744
1999	435,507	4,201,572	4,637,079	-126,436	4,510,643	61,806	75,026	72,981
Q1	116,878	1,042,925	1,159,803	-46,912	1,112,891	61,654	18,811	18,051
Q2	96,889	1,011,949	1,108,838	-32,210	1,076,628	61,806	17,941	17,419
Q3	85,451	1,066,778	1,152,229	-28,963	1,123,266	61,913	18,610	18,143
Q4	136,289	1,079,920	1,216,209	-18,351	1,197,858	62,021	19,610	19,314
2000	444,185	4,478,546	4,922,731	-76,874	4,845,857	62,236	79,098	77,863
Q1	107,199	1,124,046	1,231,245	-16,064	1,215,181	62,128	19,818	19,559
Q2	101,015	1,088,963	1,189,978	-21,628	1,168,350	62,236	19,120	18,773
Q3	92,001	1,120,114	1,212,115	-19,688	1,192,427	62,386	19,429	19,114

	Agriculture	Non-Agriculture	Gross Domestic Product	Plus : Net Factor Income Payment from the Rest of the World	Gross National Product	Population (1,000 Heads)	Per capita GDP (Baht)	Per capita GNP (Baht)
Q4	143,970	1,145,423	1,289,393	-19,494	1,269,899	62,535	20,619	20,307
2001	468,905	4,664,597	5,133,502	-133,539	4,999,963	62,836	81,697	79,572
Q1	111,788	1,172,912	1,284,700	-24,303	1,260,397	62,686	20,494	20,107
Q2	104,193	1,153,016	1,257,209	-35,687	1,221,522	62,836	20,008	19,440
Q3	97,170	1,172,895	1,270,065	-39,483	1,230,582	62,981	20,166	19,539
Q4	155,754	1,165,774	1,321,528	-34,066	1,287,462	63,127	20,934	20,395
2002	514,257	4,936,386	5,450,643	-188,437	5,262,206	63,419	85,947	82,975
Q1	124,503	1,230,612	1,355,115	-48,776	1,306,339	63,273	21,417	20,646
Q2	115,273	1,209,911	1,325,184	-62,516	1,262,668	63,419	20,896	19,910
Q3	110,040	1,233,959	1,343,999	-42,835	1,301,164	63,559	21,146	20,472
Q4	164,441	1,261,904	1,426,345	-34,310	1,392,035	63,700	22,392	21,853
2003	615,854	5,301,515	5,917,369	-242,933	5,674,436	63,982	92,485	88,688
Q1	150,511	1,321,196	1,471,707	-49,067	1,422,640	63,841	23,053	22,284
Q2	135,935	1,288,584	1,424,519	-70,631	1,353,888	63,982	22,264	21,160
Q3	133,078	1,324,803	1,457,881	-61,604	1,396,277	64,119	22,737	21,776
Q4	196,330	1,366,932	1,563,262	-61,631	1,501,631	64,256	24,329	23,370
2004	668,808	5,820,668	6,489,476	-291,032	6,198,444	64,531	100,564	96,054
Q1	158,388	1,425,304	1,583,692	-52,838	1,530,854	64,393	24,594	23,774
Q2	144,139	1,423,884	1,568,023	-86,325	1,481,698	64,531	24,299	22,961
Q3	145,565	1,460,526	1,606,091	-75,204	1,530,887	64,672	24,834	23,672
Q4	220,716	1,510,954	1,731,670	-76,665	1,655,005	64,814	26,718	25,535
2005	728,093	6,364,800	7,092,893	-344,014	6,748,879	65,099	108,955	103,671
Q1	163,326	1,552,704	1,716,030	-72,530	1,643,500	64,956	26,418	25,302
Q2	145,275	1,546,588	1,691,863	-105,794	1,586,069	65,099	25,989	24,364
Q3	168,707	1,611,908	1,780,615	-89,018	1,691,597	65,217	27,303	25,938
Q4	250,785	1,653,600	1,904,385	-76,672	1,827,713	65,336	29,148	27,974
2006	844,614	7,000,325	7,844,939	-316,810	7,528,129	65,574	119,635	114,804
Q1	205,756	1,743,135	1,948,891	-66,073	1,882,818	65,455	29,775	28,765
Q2	188,607	1,711,636	1,900,243	-109,528	1,790,715	65,574	28,979	27,308
Q3	181,958	1,763,873	1,945,831	-86,922	1,858,909	65,691	29,621	28,298
Q4	268,293	1,781,681	2,049,974	-54,287	1,995,687	65,807	31,151	30,326
2007	910,125	7,615,072	8,525,197	-311,204	8,213,993	66,041	129,089	124,377
Q1	213,819	1,882,584	2,096,403	-64,640	2,031,763	65,924	31,800	30,820
Q2	208,894	1,838,642	2,047,536	-100,758	1,946,778	66,041	31,004	29,478
Q3	189,498	1,918,241	2,107,739	-87,965	2,019,774	66,151	31,863	30,533
Q4	297,914	1,975,605	2,273,519	-57,841	2,215,678	66,261	34,312	33,439
2008	1,049,743	8,030,723	9,080,466	-323,601	8,756,865	66,482	136,585	131,718
Q1	244,865	2,038,482	2,283,347	-27,815	2,255,532	66,371	34,403	33,984
Q2	267,159	2,016,108	2,283,267	-119,300	2,163,967	66,482	34,344	32,550
Q3	230,602	2,074,785	2,305,387	-103,600	2,201,787	66,587	34,622	33,066
Q4	307,117	1,901,348	2,208,465	-72,886	2,135,579	66,692	33,114	32,022
2009p	1,036,586	8,004,965	9,041,551	-352,513	8,689,038	66,903	135,144	129,875

	Agriculture	Non-Agriculture	Gross Domestic Product	Plus : Net Factor Income Payment from the Rest of the World	Gross National Product	Population (1,000 Heads)	Per capita GDP (Baht)	Per capita GNP (Baht)
Q1	245,407	1,954,193	2,199,600	-47,953	2,151,647	66,797	32,930	32,212
Q2	258,814	1,937,206	2,196,020	-89,742	2,106,278	66,903	32,824	31,483
Q3	213,763	2,032,704	2,246,467	-131,068	2,115,399	67,005	33,527	31,571
Q4	318,602	2,080,862	2,399,464	-83,750	2,315,714	67,107	35,756	34,508
2010p1	1,251,807	8,853,014	10,104,821	-434,961	9,669,860	67,313	150,117	143,655
Q1	297,738	2,262,345	2,560,083	-60,514	2,499,569	67,210	38,091	37,190
Q2	314,429	2,157,019	2,471,448	-140,344	2,331,104	67,313	36,716	34,631
Q3	273,129	2,216,916	2,490,045	-136,989	2,353,056	67,384	36,953	34,920
Q4	366,511	2,216,734	2,583,245	-97,114	2,486,131	67,455	38,296	36,856
2011p1	1,406,280	9,133,854	10,540,134	-376,515	10,163,619	67,597	155,926	150,356
Q1	380,005	2,364,955	2,744,960	-86,923	2,658,037	67,526	40,650	39,363
Q2	369,217	2,283,777	2,652,994	-133,359	2,519,635	67,597	39,247	37,274
Q3	290,480	2,397,595	2,688,075	-112,103	2,575,972	67,675	39,720	38,064
Q4r	366,578	2,087,527	2,454,105	-44,130	2,409,975	67,754	36,221	35,569
2012p1								
Q1	356,776	2,441,138	2,797,914	-102,615	2,695,299	67,833	41,247	39,734

Source: Office of the National Economic Social and Development Board.

Exhibit 10: Gross National Product at 1988 Prices (Original)

Millions of Baht

	Agriculture	Non-Agriculture	Manu-facturing	Gross Domestic Product	Plus : Net Factor Income Payment from the Rest of the World	Gross National Product	Population (1,000 Heads)	Per capita GDP (Baht)	Per capita GNP (Baht)
1993	255,106	2,215,802	781,865	2,470,908	-34,186	2,436,722	58,010	42,595	42,005
Q1	67,030	535,204	191,999	602,234	-8,651	593,583	57,830	10,414	10,264
Q2	50,350	537,787	188,759	588,137	-13,587	574,550	58,010	10,139	9,904
Q3	50,937	573,429	196,952	624,366	-8,097	616,269	58,185	10,731	10,592
Q4	86,789	569,382	204,155	656,171	-3,851	652,320	58,360	11,244	11,178
1994	265,893	2,427,080	856,547	2,692,973	-38,237	2,654,736	58,713	45,867	45,215
Q1	66,169	601,816	215,328	667,985	-7,012	660,973	58,536	11,412	11,292
Q2	50,504	596,069	208,519	646,573	-12,436	634,137	58,713	11,012	10,801
Q3	54,057	604,428	212,493	658,485	-10,052	648,433	58,884	11,183	11,012
Q4	95,163	624,767	220,207	719,930	-8,737	711,193	59,056	12,191	12,043
1995	276,590	2,665,146	958,374	2,941,736	-40,986	2,900,750	59,401	49,523	48,833
Q1	72,541	659,322	236,524	731,863	-8,322	723,541	59,228	12,357	12,216
Q2	62,195	664,082	236,221	726,277	-14,567	711,710	59,401	12,227	11,981
Q3	52,587	668,921	242,625	721,508	-10,499	711,009	59,551	12,116	11,939
Q4	89,267	672,821	243,004	762,088	-7,598	754,490	59,701	12,765	12,638
1996	288,840	2,826,498	1,021,419	3,115,338	-58,250	3,057,088	60,003	51,920	50,949
Q1	74,995	691,432	254,969	766,427	-11,995	754,432	59,852	12,805	12,605
Q2	65,080	708,588	252,139	773,668	-21,160	752,508	60,003	12,894	12,541
Q3	56,303	721,705	259,204	778,008	-14,934	763,074	60,152	12,934	12,686
Q4	92,462	704,773	255,107	797,235	-10,161	787,074	60,302	13,221	13,052
1997	286,833	2,785,782	1,036,152	3,072,615	-64,300	3,008,315	60,602	50,702	49,641
Q1	74,957	699,162	271,355	774,119	-11,122	762,997	60,452	12,806	12,622
Q2	64,046	705,144	259,726	769,190	-21,482	747,708	60,602	12,692	12,338
Q3	55,638	709,837	260,240	765,475	-17,566	747,909	60,751	12,600	12,311
Q4	92,192	671,639	244,831	763,831	-14,130	749,701	60,901	12,542	12,310
1998	282,606	2,467,078	923,602	2,749,684	-72,188	2,677,496	61,201	44,929	43,749
Q1	75,242	644,063	241,551	719,305	-15,272	704,033	61,051	11,782	11,532
Q2	56,946	605,469	224,440	662,415	-23,407	639,008	61,201	10,824	10,441
Q3	52,554	606,345	222,758	658,899	-18,735	640,164	61,352	10,740	10,434
Q4	97,864	611,201	234,853	709,065	-14,774	694,291	61,503	11,529	11,289
1999	289,178	2,582,802	1,033,431	2,871,980	-56,473	2,815,507	61,806	46,468	45,554
Q1	78,086	639,703	254,412	717,789	-23,006	694,783	61,654	11,642	11,269
Q2	60,103	625,142	246,788	685,245	-14,760	670,485	61,806	11,087	10,848
Q3	55,700	658,640	262,222	714,340	-12,750	701,590	61,913	11,538	11,332
Q4	95,289	659,317	270,009	754,606	-5,957	748,649	62,021	12,167	12,071
2000	309,948	2,698,453	1,096,168	3,008,401	-20,379	2,988,022	62,236	48,339	48,011
Q1	80,517	683,822	278,407	764,339	-3,341	760,998	62,128	12,303	12,249
Q2	68,274	658,955	266,656	727,229	-7,017	720,212	62,236	11,685	11,572
Q3	60,458	671,231	269,749	731,689	-5,209	726,480	62,386	11,728	11,645

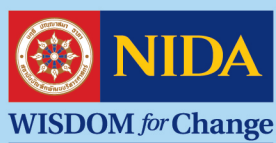|	Agriculture	Non-Agriculture	Manu-facturing	Gross Domestic Product	Plus : Net Factor Income Payment from the Rest of the World	Gross National Product	Population (1,000 Heads)	Per capita GDP (Baht)	Per capita GNP (Baht)
Q4	100,699	684,445	281,356	785,144	-4,812	780,332	62,535	12,555	12,478
2001	320,016	2,753,585	1,111,457	3,073,601	-79,194	2,994,407	62,836	48,915	47,654
Q1	82,368	695,155	282,105	777,523	-13,423	764,100	62,686	12,403	12,189
Q2	69,480	673,658	271,300	743,138	-21,267	721,871	62,836	11,827	11,488
Q3	60,528	686,356	272,831	746,884	-23,895	722,989	62,981	11,859	11,479
Q4	107,640	698,416	285,221	806,056	-20,609	785,447	63,127	12,769	12,442
2002	322,179	2,914,863	1,190,807	3,237,042	-142,944	3,094,098	63,419	51,042	48,788
Q1	83,720	728,738	295,357	812,458	-30,743	781,715	63,273	12,841	12,355
Q2	69,030	711,007	287,946	780,037	-39,420	740,617	63,419	12,300	11,678
Q3	63,571	726,274	294,585	789,845	-26,067	763,778	63,559	12,427	12,017
Q4	105,858	748,844	312,919	854,702	-46,714	807,988	63,700	13,418	12,684
2003	363,033	3,105,133	1,318,279	3,468,166	-189,923	3,278,243	63,982	54,205	51,237
Q1	94,028	774,484	327,511	868,512	-30,323	838,189	63,841	13,604	13,129
Q2	79,272	752,443	321,032	831,715	-43,989	787,726	63,982	12,999	12,312
Q3	70,418	771,998	322,147	842,416	-38,448	803,968	64,119	13,138	12,539
Q4	119,315	806,208	347,589	925,523	-77,163	848,360	64,256	14,404	13,203
2004	354,431	3,333,758	1,426,338	3,688,189	-228,018	3,460,171	64,531	57,154	53,620
Q1	93,871	832,825	360,287	926,696	-32,065	894,631	64,393	14,391	13,893
Q2	72,949	813,488	345,475	886,437	-52,791	833,646	64,531	13,737	12,919
Q3	67,787	827,347	348,187	895,134	-45,459	849,675	64,672	13,841	13,138
Q4	119,824	860,098	372,389	979,922	-97,703	882,219	64,814	15,119	13,612
2005	347,892	3,510,127	1,499,882	3,858,019	-243,838	3,614,181	65,099	59,264	55,518
Q1	86,511	873,464	370,292	959,975	-53,344	906,631	64,956	14,779	13,958
Q2	69,839	858,522	366,450	928,361	-75,889	852,472	65,099	14,261	13,095
Q3	68,825	875,348	370,249	944,173	-61,677	882,496	65,217	14,477	13,532
Q4	122,717	902,793	392,891	1,025,510	-52,928	972,582	65,336	15,696	14,886
2006	365,428	3,689,076	1,588,105	4,054,504	-201,386	3,853,118	65,574	61,831	58,760
Q1	92,259	926,362	399,049	1,018,621	-43,135	975,486	65,455	15,562	14,903
Q2	75,503	900,187	386,505	975,690	-69,685	906,005	65,574	14,879	13,817
Q3	73,301	915,788	389,365	989,089	-54,877	934,212	65,691	15,057	14,221
Q4	124,365	946,739	413,186	1,071,104	-33,689	1,037,415	65,807	16,276	15,765
2007	369,772	3,889,254	1,686,372	4,259,026	-194,937	4,064,089	66,041	64,491	61,539
Q1	94,453	971,136	418,003	1,065,589	-41,264	1,024,325	65,924	16,164	15,538
Q2	76,587	944,186	408,268	1,020,773	-63,752	957,021	66,041	15,457	14,491
Q3	72,114	971,754	415,553	1,043,868	-55,162	988,706	66,151	15,780	14,946
Q4	126,618	1,002,178	444,548	1,128,796	-34,759	1,094,037	66,261	17,036	16,511
2008	385,225	3,979,608	1,751,411	4,364,833	-137,885	4,226,948	66,482	65,654	63,580
Q1	98,592	1,034,297	460,168	1,132,889	-4,188	1,128,701	66,371	17,069	17,006
Q2	83,489	990,474	438,959	1,073,963	-56,184	1,017,779	66,482	16,154	15,309
Q3	75,983	999,774	438,307	1,075,757	-46,473	1,029,284	66,587	16,156	15,458
Q4	127,161	955,063	413,977	1,082,224	-31,040	1,051,184	66,692	16,227	15,762
2009p	390,362	3,872,777	1,645,015	4,263,139	-153,069	4,110,070	66,903	63,721	61,433

	Agriculture	Non-Agriculture	Manu-facturing	Gross Domestic Product	Plus : Net Factor Income Payment from the Rest of the World	Gross National Product	Population (1,000 Heads)	Per capita GDP (Baht)	Per capita GNP (Baht)
Q1	103,746	949,320	390,936	1,053,066	-15,770	1,037,296	66,797	15,765	15,529
Q2	82,560	936,087	396,599	1,018,647	-38,599	980,048	66,903	15,226	14,649
Q3	76,413	969,202	407,348	1,045,615	-62,867	982,748	67,005	15,605	14,667
Q4	127,643	1,018,168	450,132	1,145,811	-35,833	1,109,978	67,107	17,074	16,540
2010p1	381,401	4,214,711	1,873,170	4,596,112	-199,900	4,396,212	67,313	68,280	65,310
Q1	101,451	1,078,184	480,316	1,179,635	-25,782	1,153,853	67,210	17,551	17,168
Q2	83,774	1,028,990	466,288	1,112,764	-68,734	1,044,030	67,313	16,531	15,510
Q3	72,986	1,041,356	454,683	1,114,342	-63,140	1,051,202	67,384	16,537	15,600
Q4	123,190	1,066,181	471,883	1,189,371	-42,244	1,147,127	67,455	17,632	17,006
2011p1	396,951	4,202,704	1,793,358	4,599,655	-139,110	4,460,545	67,597	68,045	65,987
Q1	109,114	1,107,910	488,418	1,217,024	-35,653	1,181,371	67,526	18,023	17,495
Q2	89,353	1,053,779	466,020	1,143,132	-52,518	1,090,614	67,597	16,911	16,134
Q3	73,354	1,082,396	468,984	1,155,750	-41,953	1,113,797	67,675	17,078	16,458
Q4r	125,130	958,619	369,936	1,083,749	-8,986	1,074,763	67,754	15,995	15,863
2012p1									
Q1	112,142	1,107,996	467,715	1,220,138	-39,900	1,180,238	67,833	17,987	17,399

Source: Office of the National Economic Social and Development Board.

9. References

Baldwin, R. E. (1966). <u>Economic development and export growth: A study of northern Rhodesia, 1920-1960</u>. Berkeley and Los Angeles, CA: University of California Press.

Barro, Robert J. (2001, June). <u>Economic growth in east Asia before and after the financial crisis</u> (NBER Working Paper No. w8330). Cambridge, Mass.: National Bureau of Economic Research.

Chinprateep, Apirada. (2011). Thai Economic Development and Optimal Tax on Economic Sectors (Multisectoral Dynamic Model Analysis) <u>World Review of Business Research</u> Vol. 1. No. 3. July 2011. pp. 13-26

Fei, J. C. H. and Ranis, G. (1964). <u>Development of the labor surplus economy: Theory and policy</u>. Homewood, IL: Irwin.

Harberger, Arnold C. (1962). The incidence of the corporation income tax. <u>Journal of Political Economy</u>, 70, 215-40.

Harberger, Arnold C. (1964). Taxation, resource allocation and welfare. In <u>The role of direct and indirect taxes in the federal reserve system</u> (a Conference Report of the National Bureau of Economic Research and the Brookings Institution). Princeton, New Jersey: Princeton University Press.

Hernandez, Leonardo F. and Montiel, Peter J. (2001, November 1). <u>IMF: Post-crisis exchange rate policy in five Asian countries: Filling in the "hollow middle"?</u> (Working Paper No. 01/170). International Monetary Fund.

Hirschman, Albert O. (1958). <u>The strategy of economic development</u>. New Haven, CT: Yale University Press.

Johnston, B. F. and Mellor, J. W. (1961). The role of agriculture in economic development. <u>American Economic Review</u>, 51, 566-593.

Jorgenson, D. W. (1961). The development of a dual economy. <u>Economic Journal</u>, 71, 309-334.

Koopmans, T. (1965). On the concept of optimal economic growth. In Study Week on The Econometric Approach to Development Planning (1963: Vatican City), <u>The econometric approach to development planning</u>. Amsterdam; Chicago: North-Holland; Rand McNally.

Krueger, Anne. (2002, July 26). <u>Preventing and resolving financial crises: The role of sovereign debt restructuring</u>. International Monetary Fund.

Lewis, W. A. (1954). Economic development with unlimited supplies of labor. Manchester School of Economic and Social Studies, 22, 139-191.

Nicols, W. H. (1963). An 'agricultural surplus' as a factor in economic development. Journal of Political Economy, 71, 1-29.

Panayotou, Theodore. (1989). Thailand: The experience of a food exporter. In Sicular, T. (Ed.), Food price policy in Asia (pp. 65-108). Ithaca, New York: Cornell University Press.

Prebisch, Raúl. (1950). The economic development of Latin America and its principal problems. New York: United Nations.

Ramsey, F. (1928). A mathematical theory of saving. Economic Journal, 38, 543-59.

Ricardo, David. (1817). On the principles of political economy and taxation. London: John Murray, Albemarle-Street.

Romer, Paul M. (1990, October). Endogenous technological change. Journal of Political Economy, 98(5), part II, S71-S102.

Schuh, G. Edward (1976). The new macroeconomics of agriculture. American Journal of Agricultural Economics, 58, 802-811.

Schultz, T. W. (1953). The economic organization of agriculture. New York: McGraw-Hill.

Scott, David. (2002, May 9). A practical guide to managing systemic financial crises: A review of approaches taken in Indonesia, the Republic of Korea, and Thailand (Working Paper No. 2843). World Bank.

Siamwalla, Ammar and Setboonsarng, Suthad. (1986). The political economy of agricultural pricing policies in Thailand. Washington: World Bank.

Solow, Robert M. (1956, February). A contribution to the theory of economic growth. Quarterly Journal of Economics, 70(1), 65-94.

Timmer, C. P. (1988). The agricultural transformation. In Chenery, H. and Srinivasan, T.N. (Eds.), Handbook of Development Economics, Vol. 1. Amsterdam; New York: Elsevier North-Holland.