

Thailand

Thailand's eGovernment for Poverty Eradication and Helping the
Disadvantaged Groups

Wichian Chutimaskul

School of Information Technology,
King Mongkut's University of Technology Thonburi
126 Prachauthit Rd, Bangmod, Tungkru, Bangkok 10140
Tel: 662-470-9852, Fax: 662-872-7145
Email: wichian@sit.kmutt.ac.th

Consultancy to project INT/98/X70

Executive Summary

eGovernment policies and programmes emphasizing the poverty eradication and helping the disadvantaged groups in Thailand are addressed. The Thai government realizes the importance of the weakest groups and tries to improve their quality of life and create the caring society. Many related plans and policies, such as the National Economic and Social Development Plan IX, the National Information Technology Policy (IT2010), and the National Information and Communication Technology (ICT) Master Plan (2002-2006), are developed to partly help solve the above problems. In particular, eGovernment for improving the weakest can be found by gathering the data of the poor via the nationwide poverty registration system. This gives the government data-information-knowledge for making a decision of solving the weakest groups' problems. The private sector also supports this by creating web portal to provide related database. Concerning the creation of caring the society, eGovernment can be used for bridging the digital divide as found in many ICT programmes, such as Internet Tambon (sub-district network), government information technology services, Thai rural network, and ThaiTambon web portal. The government also wants to promote the local community products and services, which can be claimed as the main income, by using local eCommerce programme called One Tambon-One Product (OTOP). In addition, the use of eGovernment for supporting the country security can be found on the smart card project for three provinces in the South of Thailand to help decrease the violence and terrorism in these areas. All in all, these projects are spaghetti work. There is no direct eGovernment plan and policy for poverty eradication and helping the disadvantaged groups, which is a complicated task.

To overcome the weakest groups' problems, the Thai government has established the National Poverty Eradication Center in 2004 and the National Command Center against Poverty in 2006 to interoperate all work related to the weakest people among government agencies, private sector, citizens, and NGOs. The employment of eGovernment for this problem is to elicit the data of the poor and the disadvantaged groups throughout the country. The data can be then provided to related stakeholders to help manage the government projects, e.g. village and urban community fund, people's bank, debt moratorium for small farmers, transferring asset to fund, OTOP, and Internet Tambon, to decrease the weakest groups' problem. The use of eGovernment for interchange transactions among agencies is also important. At this stage, eGovernment cannot help support the complete integration and intelligence levels. It would be a challenge for the government to use eGovernment in most government activities to help solve the weakest groups' problems. The integrated eGovernment plans and policies for the weakest groups should be created.

Due to the initial use of eGovernment for poverty eradication and helping the disadvantaged groups, all stakeholders need to change the way they learn, work and live. The weakest mainly lacks ICT knowledge and skill, and a chance to access to government eService; they require a sufficient education to improve their social status. The collaborative ICT tools are needed to improve the communities' interface for inter-operative work among communities. In addition, the use of eGovernment without planning for building eCommunity will gain less benefit. Therefore, it is a challenge to find out a suitable business model for each local eCommunity for sustainable development that will permanently solve the poor and the disadvantaged groups' problems and will help achieve Asian-Pacific or universal eGovernment collaboration.

1. Introduction

1.1 Background of Thailand's eGovernment Policies

The National Economic and Social Development Plan IX

eGovernment is a strategic tool for supporting better government administration and public services. eGovernment itself is not a government. The right use of eGovernment is to support good governance, i.e. transparency and openness, reliability and predictability, accountability, efficiency and effectiveness, which can decrease the country's risks. Such risks are all kinds of corruptions, the poverty, and the minority group conflict, etc. To develop the national eGovernment policies it is necessary to get participation among related stakeholders, such as the government, citizen, business and NGO. Concerning the eGovernment development in Thailand, the vision of "the accessible government" has been set up. Its mission is to develop a practical public administration and services system using ICT for efficiency and effectiveness within time. Thailand has the National Economic and Social Development Plan IX (2002–2006) whose major emphasis is placed on balanced development of economic, social, human, and environmental resources. This plan contains seven strategies as follows:

1. The good governance strategy
2. Development of human potential and social protection
3. Restructuring of management for sustainable rural and urban development
4. Natural resources and environment management
5. Macro economic management strategy
6. Upgrading national competitiveness
7. Strengthening of science and technology development

In addition to the National Economic and Social Development Plan IX, Thailand's national frameworks specifically concerning information and communication technology (ICT) can be found in a) the National Information Technology Policy Framework 2001-2010 (IT2010) for Knowledge-Based Economy which is the successor of the First National Information Technology Policy (IT2000), and b) the National Information and Communication Technology (ICT) Master Plan (2002-2006).

The National Information Technology Policy

The First National Information Technology Policy (IT2000) in Thailand had been set up in 1996 in order to support knowledge-based society and digital divide reduction. This policy addresses three major missions. They are a) the investment of national ICT infrastructure for equal national-wide accessibility, b) ICT human development, and c) eGovernment information system development for improving the public administration and services. During this plan, Thailand had developed the telecommunication throughout the rural areas, e.g. having the fix-telephone lines to all villages, improving the internet bandwidth, increasing the internet service providers, and supporting IT laws. Furthermore, SchoolNet consisting of 2,300 schools had been established. The Government Information Technology Service (GITS) was also developed to provide basic transport services that connect government agencies, citizens and businesses to hi-speed Government Information Network (GINet). GINet, the first ICT platform which started in 1997, is a network service that consists of secure email, file transfer protocol (FTP), multimedia online broadcasting and web-hosting, distributed computing service (information interchange), application and information services, and program delivery service that improves the government services. For the local eGovernment, "Internet Tambon" was developed for sub-districts administration and communication [1].

The Second National Information Technology Policy (IT2010) emphasizing on knowledge-based economy continues to improve Thailand's ICT for social and economic development. The goal of IT2010 is to develop eThailand which is composed of 5-e flagships. They are eSociety, eEducation, eIndustry, eCommerce, and eGovernment. Its major concentrations are information and knowledge content, ICT human resource development, digital divide reduction, and qualified leadership for ICT measurement.

The policies concerning eGovernment in Thailand addressed by the Prime Minister Thaksin Shinawatra in 2001 are composed of four highlight aspects as follows [2].

1. Support the development of science and technology personnel at every level so that there is a sufficient number in terms of both quantity and quality. This will help support sustainable national development and prepare the country for entering the global economy.
2. Promote science and technology research and development in both the public and private sectors to benefit the management and production of Small and Medium Enterprises (SMEs). Science and technology should be employed for helping resolve economic and social problems, and improving the potential, expertise and proficiency of Thais.
3. Promote the use of appropriate and inexpensive information technology for good governance.
4. Develop the science and technology laws to gain the benefit from scientific and technological development and protect intellectual property rights.

Overall the basic issues of eGovernment development are concerned with ICT awareness, skill and access, and rural community participation, which can give various benefits ranging from personal to enhanced business opportunities.

In addition, the National Information and Communication Technology (ICT) Master Plan (2002-2006) contain seven strategies as follows:

1. The development of the ICT industry into a regional leader
2. The utilization of ICT to enhance the quality of life and society
3. The reform and enhancement of the capability on ICT research and development
4. The reinforcement of social capacity for future competition
5. The development of entrepreneurs capacity for the expansion of global markets
6. The utilization of ICT in Small and Medium Enterprises
7. The utilization of ICT in government administration and services

The Roadmap of Thailand's eGovernment Development

The roadmap of Thailand's eGovernment development in year 2005-2007 which has been established to support democratic governance is as follows [3]. First, the service aspect provides that each government agency must provide at least one eService. The development of one-stop (or one-start) service and multi-channel service having a standard platform is to provide better government services. The infrastructures, such as networking, information framework for Prime Minister's Operation Center (PMOC) and General Financial Management Information System (GFMIS), and security standard are required to support a high performance. Second, the laws and regulation such as eBusiness law, data privacy, and ICT fraud and misuse protection are addressed. Finally, the Ministry of Information and Communication Technology (MICT) will act as a representative of eGovernment agency for right sizing the government work.

The challenge of employing ICT for competitive advantage causes the government agencies to improve themselves. eGovernment is one of the key drivers for national social and economic development. It improves citizen and business services by reducing the service time and cost, and work processes, and supports government administration by

providing competitive advantage among government agencies and data-information-knowledge for government decision making. In addition, eGovernment for public services is classified into four categories [4]. They are a) government to business (G2B) such as eBusiness, eCustom, eProcurement, eAuction, and eLogistics b) government to citizen (G2C), e.g. eEducation, eCitizen, eRevenue, social security, ePassport, vehicle registration, and eJob, c) government to government (G2G), e.g. data interchange among local and central government agencies, and d) government to employee (G2E), e.g. performance improvement. eGovernment is also composed of two types of information systems: back-office information system and front-office information system. The aim of back-office information system, such as General Financial Management Information System, human resource information system, and Minister Operation Center (MOC) is to improve the internal operation and to provide the communication channel between local and central eGovernment for data interchange using internet and web technologies. The front-office information system, such as eService, eProcurement, and eRegistration requires that each government agency needs to develop her website for public services. The beginning stage of Thailand's eGovernment development is to identify and construct the framework and regulation for establishing eGovernment infrastructure, system security, and electronic data interchange [5]. Furthermore, the research done by the National Electronics and Computer Technology Center (NECTEC) showed that the government has approached 1,095 IT projects with the total budget of 28,436.25 million baht in 2003. In 2004, there are 1,078 IT projects with the total budget of 60,408.62 million baht. The large project is the Smart Card project with the total budget of 7.9 billion baht to distribute 64 million smart cards to all Thai citizens.

The successful use of eGovernment can be viewed as an indicator for monitoring and assessing government performance. It also supports the country development and builds trust to all stakeholders because of the transparency and openness. If the government informs their work plans, processes, progresses, and related activities via eGovernment, it will be a smart government. The government administration and public services can be examined and monitored in order to award or punish related stakeholders. The proper use of eGovernment makes things clear and people trust on government. This leads to the right direction of country development. The ICT indicators in Thailand have been set up for monitoring and measuring the performance and progress by using the National ICT Master Plan (2002-2006) as its framework [6]. Three approaches of obtaining these ICT indicators are the use of existing administrative record, a survey and census technique by the National Statistics Office, and the use of data provided by private organizations. In addition, NECTEC has initialed some techniques, such as true-hit, Service eReadiness Explorer (SEE) evaluation program to evaluate government websites, and internet user profile survey as ICT usage indicators. Other eGovernment indicators are ICT budget, eProcurement, and government agencies' websites. Furthermore, the digital divide indicators are comprised of telecommunication, computer usage, and Internet penetration. However, the growth of mobile telecommunication has not yet solved the digital divide problem.

The measurement of Thailand's eGovernment has been classified into five phases. They are information, interaction, interchange transaction, integration, and intelligence. The first phase requires each government agency to have own webpage to provide information services. Next, the interaction phase describes the information retrieval and query system. The interchange transaction phase is to provide eService, e.g. eTax and online registration. The integration phase is to merge related government agencies' data to provide one-stop service. Finally, the intelligence phase is to learn citizens' behavior to supporting decision making. Most of agencies' websites contain their web boards to get feedback from citizen and business. The use of collaborative technology, e.g. email, web-board is to provide the

communication among government agencies' administrators and officers. However, the lack of collaboration among agencies and systematic mechanism that encourage collaboration is the main problem of government eService.

1.2 Focus on the Poor and the Disadvantaged Groups

The use of Thailand's eGovernment for greater participation of the community in planning and implementation of programs related to the poor and the disadvantaged groups can be measured in the information, interaction, and interchange transaction phases. The poverty line emphasizing on the poorest is the level of income that allows one to enjoy minimum standard of living. Those whose incomes are below the poverty line are classified as poor compared to the determined level of living standard [7]. In Thailand, the population is 62.2 million. Using the national poverty line, 7.08 million (11.25%) of Thai are poor [8]. The national poverty line increases from 838 baht in 1994 to 1,242 baht in 2004. In Bangkok the poverty line increases from 1,346 baht to 1,853 baht during this period. The poverty line in the North East of Thailand which can be claimed as the poorest region increases from 707 baht to 1,078 baht. The number of the poor in 1994 and 2004 decrease as follows: the whole country from 14.17 million to 7.08 million, Bangkok from 0.17 million to 0.11 million, and the North East from 7.27 million to 3.65 million [8]. In particular the poor in the urban is 0.98 million; 41.6% of the urban poor live in the North East, especially in Kalasin, Chaiyapum, and Udonthani. The main causes of the poverty are low education, the characteristic of being highly dependent of the poor in agriculture sector, and landless farmers [9]. 7.4 % of adult illiteracy is the reason for this poverty, which causes a low earning ability [10].

The National Economic and Social Development Plan IX (2002–2006) mentions the use of ICT for the poor and the disadvantaged groups in strategies 2, 3, and 7. Strategy 2, the development of human potential and social protection, consists of the development of ICT systems for providing information on health, ICT systems for connecting various knowledge resources, the database for labour markets, job-finding systems, and the database of the poor and the disadvantaged groups. Strategy 3, the restructuring of management for sustainable rural and urban development, contains the development of the local knowledge and wisdom databases, the database of the poor in rural and urban communities, the use of ICT in educating citizens, the networking between rural and urban development, and the improvement of the database needed for the development such as the village economic and social data. Strategy 7, the strengthening of science and technology development, addresses the development of ICT infrastructure that citizens can equally access, and the creation and the utilization of information for various activities e.g. life-long education.

The use of ICT for the poor and the vulnerable and marginalized groups is included in the IT2010 as follows:

1. Improvement in the quality of life

- Utilize ICT in order to disseminate the concept of a sufficient economy
- Support community eCommerce in order to strengthen local economies and support the "One Tambon One Product: OTOP" policy
- Develop database systems for decision-making and planning on quality agriculture, e.g. providing information on the improvement of product quality and reduction in production costs, along with information on product processing and marketing
- Develop information systems (IS) in order to ensure quality, equal, and thorough coverage, providing information on basic public health and ensuring the health and well-being of the people

2. Creation of a caring society

- Promote the application of ICT among rural communities, the disabled, and the underprivileged
- Promote the creation of networking among a variety of social groups for the exchange of perceptions and the creation of mutual understanding

The National Information and Communication Technology Master Plan (2002-2006) that supports the poor and the vulnerable and marginalized groups contains the following strategies: the utilization of ICT to enhance the quality of life and society (strategy 2), and the utilization of ICT in government administration and services (strategy 7). The plans and activities suggested in these strategies include the following:

1. Promoting ICT applications to serve social development, such as healthcare, education, community learning, services for disadvantaged groups, public safety, and to generate economic value from indigenous knowledge
2. To apply ICT in the development of education, content creation, and learning activities
3. To promote information and knowledge development that enhances the quality of community life by utilizing ICT in areas such as lifelong education, public health and health promotion, employment, price information for agricultural products, and natural disaster warnings

1.3 Special Concerns of the Poor and the Disadvantaged Groups

eGovernment for poverty eradication and helping the disadvantaged groups in Thailand does not mean having direct policy. However, the use of eGovernment for greater participation of the community in planning and implementation of programs for improved service delivery especially relating to the millennium development goals (MDGs) are as follows. The use ICT to promote OTOP, which partly benefit to the poor, is addressed. There is also an “Internet Tambon”, which is a sub-district network, for all Tambon Administration that everybody can access the network. This is one of the means to increase an opportunity to access government data-information-knowledge. Note that ICT provides opportunities to improve rural market, reduce poverty by education, and allow the connectivity among remote citizens. However, an access to ICT is considered crucial for the poor because it requires new sources of income and employment for the poor, improves delivery of health and education services, and competitiveness of the economy [11]. The less use of eGovernment system hardly makes the government get data for poverty eradication and the disadvantaged groups conflict solving. The government has to pay additional cost to learn such problems. For example, the remote cabinet meeting in the rural area should employ ICT for helping the poor rather than informing their work and building the image, e.g. cabinet fantasy as many people said. This might spend much people tax money against the King Bhumipol’s suggestion on the “Sufficient Economic” given on Dec 1997 during the world economic crisis. This concept can be claimed as a long term sustainable country development for helping the poor and the disadvantaged groups. It is important to say that the government performance can be measured by eGovernment performance.

The use of ICT for the poor can be found in the government’s Administration of State Affair Plan (2005-2008) which includes the Poverty Eradication Strategy. This strategy includes the development of the integrated management of information needed in the poverty eradication. It is also stated in the 4-year administration plans of the Ministry of Interior and its Department of Provincial Administration. The Community Development Department’s 4-year plan includes the creation of a database and the development of an

information system to support community management and poverty eradication. Concerning the use of ICT for the disadvantaged groups, the Ministry of Social Development and Human Security has a strategy which mentions the development of an information system for monitoring their target groups including the disadvantaged. One of these eGovernment policies is to provide the equal access to government information; however, the crucial ICT pricing in the rural areas blocks the rural poverty alleviation. The poor with ICT skills can access eGovernment system via government provided ICT.

eGovernment related to the poor and the disadvantaged groups will concentrate on their economic and social development, such as village and urban community fund, people's banks, debt moratorium for small farmers, transferring asset of the poor to capital, corruption watch, and drug war. Furthermore, the capability of the poor can be built by a life long learning through ICT. The social protection and social security can be found on information system (IS) for the national healthcare, e.g. 30 baht treat all diseases; the grassroots' life improvement, e.g. the poor, old, disabled, slum dweller, homeless, remote poor citizen, and prostitute; and disadvantaged group, e.g. catastrophic sufferers. For the national resource management, land settlement and reform is the main concern. Finally, the streamlining public administration will address the community action plan for poverty reduction.

2. Selection of Policies and Programmes for Detailed Discussion

2.1 Relevance to the Theme of the Project

There are three levels of government strategies for poverty and disadvantaged group. The national level concerns the productivity that the government wants to increase 5% income for the poverty each year. The society level requires building a strong society and local wisdom and knowledge, such as village and urban community fund, and OTOP. At present, there are 16,735 poor communities. At an individual level, there are 7.08 million poor that need to support their basic education and sufficient economic, e.g. transferring asset to fund, debt moratorium for small farmers, etc [12]. Using the Second National Information Technology Policy (IT2010), there are some policies and programmes relating to the use of eGovernment for the poor and the disadvantaged groups as follows.

The Use of eGovernment for Improving the Quality of Life

1. Nationwide Poverty Registration Information System. The National Poverty Eradication Center and the National command Center against Poverty are the key responsible units. At present, there are 8.5 million poor registering to this system [13]. The formal debt is 556,240 million baht, and the informal debt is 136,750 million baht [14]. The government wants to reduce the poverty and improve the quality of life within 2009.
2. "RakBanKerd" web portal. This web portal, established by United Communication Industrial Corp (UCOM), a private company, contains many databases related to the grassroots projects, such as village and urban community fund, people's bank, debt moratorium for the small farmers, 30 baht treat all as a national healthcare, and the geographical information system (GIS) and remote sensing for national resources (land and water) settlement and reform for poverty alleviation.

The Use of eGovernment for the Creation of a Caring Society

3. Bridging the Digital Divide. ICT infrastructure for bridging the digital divide to allow the poor and the disadvantaged groups to have equal access to government information and services. The use of ICT for this theme contains the following programmes.
 - Government Information Technology Service (GITS). It is a policy given by National Information Technology Committee to develop the Government Information Network (GINet) which is designed to provide information service to all government agencies for improving public services. The missions of the GITS are 1) the basic transportation services connecting users to hi-speed GINet, 2) network services consisting of a secure email, FTP, multimedia broadcasting and web-hosting, 3) distributed computing services, 4) application and information services, and 5) program delivery services.
 - Internet Tambon. It is a sub-district networking to promote the creation of communication channels among various social groups for the exchange of perceptions and the creation of mutual understanding. Internet Tambon aim is to link all sub-districts (Tambon) to the Department of Local Administration Promotion to enhance the decentralized control to local government agencies. Note that the Department of Local Administration Promotion, Ministry of Interior is a responsible agency for sub-district administration. This gives the Internet access to rural areas at a sub-district level. At present, there are around 7,500 sub-districts in Thailand. Thus, this programme helps reduce the digital divide by giving an access to government information and services.
 - ThaiTambon.com. This is the source of Internet Tambon data, which is a center to promote and support community entrepreneur [15]. This website has been created in 1999 by the government led by the Prime Minister Dr. Thaksin Shinawatra for rural area development and improvement. This programme provides encouragement and opportunities for rural people to access the internet.
 - The “ThaiRuralNet”. This is a project that addresses the problem of information dissemination to farmers at the grassroots level by providing information for agriculture and bulletin board system. This reduces the digital gap by providing access for those who live in the rural areas.
4. Income generation. This policy, supported by the rural and urban communities’ eCommerce projects, such as One Tambon-One Product (OTOP) and “ThaiTambon.com”, is to strengthen local economics. OTOP is a project under the Ministry of Commerce, which aims at developing a competitive advantage for each sub-district by focusing on local products and services. The government wants to promote OTOP to both the nation-wide and global markets. There are 6,932 products which the total sales 42.93 million baht in 2003.
5. The country security. The smart card project was created to help support the political problem solving in three provinces in the South of Thailand. The government rushes this project in order to manage and control the citizens’ data, which will help reduce the political conflict and violence in these areas.

The details of above policies and programs are illustrated in section 3.1.

2.2 Potential for Further Expansion

Other programmes that can help support the poverty eradication and helping the disadvantaged groups in the future are as follows.

The Use of eGovernment for Improving the Quality of Life:

- 1) The use of geographical information system (GIS) and remote sensing for national resource, e.g. land and water, management and reform for the poor
- 2) Information system for monitoring and the evaluation of all grassroots projects to utilize the citizens' taxes for helping the weakest groups
- 3) ICT for education. The human resource development is an original source for helping the weakest group. The examples of human resource development are a) MOENet (the Ministry of Education Network) which is an educational network consisting of SchoolNet (School Network) and UniNet (University Network), and b) "one laptop per child" programme for supporting an equal opportunity for all school children to have a 100 dollar laptop for computer usage. Note that a number of one million laptops is the target of this program in order to promote eLearning and to build the eSociety.

The Use of eGovernment for the Creation of a Caring Society:

- 4) ICT for disaster warning, such as Tsunami, and earthquake.
- 5) The customer registration for pre-paid mobile phone SIM card. This is another example of using ICT in dealing with the insurgency in the South. Previously people who used pre-paid mobile phones did not have to register their SIM cards. The insurgents used pre-paid mobile phones to ignite bombs. Although the officials may be able to trace the phone numbers, they were not able to identify owners as the SIM cards were not registered. Hence, the Ministry of ICT asked people in the three provinces in the deep South who used pre-paid mobile phones to register their SIM cards. Although this measure may not completely stop the use of mobile phones in bombing, it should more or less prevent and reduce the problem.
- 6) Government information system and web portal
 - a. KhonThai.com. This gives general sub-district information, e.g. plan-project-budget, news, local products and services, etc. It also gives the data of poverty and social sufferer registration system.
 - b. Mahadthai.com. This website is a citizen portal for online government services, e.g. individuals, family, housing, electricity, water supply, government housing financing, and GIS, etc. This project is under the supervision of the Ministry of Interior.
 - c. The government website for three million disabled Thais
 - d. The "Ua-A-Thorn" low-cost housing programme for the poor. This programme started on 2003 by building 200,000 house units. The project also aims to build other 244,000 and 400,000 houses in 2006 and 2009, respectively.
 - e. "Corruption watch" is a website created by NGOs in 2006. It provides citizens additional channel to inform the corruption events within the public sectors. However, the website was blocked due to some people loses their benefits.
- 7) The quality improvement of eGovernment leadership and structure
 - a. CIO for streamlining a public administration
 - b. IT City

3. Description of Policies/Programmes under Study

The details of eight projects as addressed in section 2.1 are shown in table 1.

Table 1: The description of projects under study

Project	Description	Objective	Beneficiary	Agency	Partner	Duration	Status
1 Nationwide Poverty Registration Project	This project was launched to allow people all over the country to register their grievances with authorities. People registered in this project are divided into seven categories: landlessness, homelessness, illegal occupations, the need for appropriate occupations for students, deception, people's debts, and the need for low-cost housing. Consequently, all problems gathered from the registration are classified and organized into the website www.khonthai.com/poverty .	To create the poverty map in order to know the real causes deeply rooted of poverty so that the suitable and immediate assistance can be prepared	The poor	The National Poverty Eradication Center, Ministry of Interior	All Thais who have the poverty or grievous problems	2003 - 2004	The National Poverty Center has assigned its subcommittees to handle specific functions, which involve employment generation and career promotion, farmland and housing, debts, and community development plans to solve poverty problems on a sustainable basis. There are 8,437,500 people (13.44 % of Thai population) registered to this system in 2004. The main problems from this registration are the debt, land for cultivation and housing. Additionally, the Government has established mobile units, known as "poverty eradication caravan" to be sent across the country to help solve poverty problems by giving advice and services for occupational development, providing skill training, and bringing all types of government services to local people. This program will also be extended to support G2E for reducing the poverty among the government employees.
2 RakBanKerd Web Portal	This project was developed by the private sector called UCOM. It provides necessary data concerning the weakest groups, such as village and urban community fund, transferring asset to fund, drug war, and local tourism.	-To promote the fundamental data of Thailand -To provide the basic national agricultural data, and grassroots project information	The government, business, citizen, and NGOs	United Communication Industrial Corp (UCOM)	The government, business, citizen, and NGOs	2000 - present	There are many interested and up-to-date data related to the weakest groups. The database has been updated and widely used as reference.

Project	Description	Objective	Beneficiary	Agency	Partner	Duration	Status
3 Government Information Technology Services	It is a policy given by National Information Technology Committee in order to develop the Government Information Network (GINet). GITS is an important government intranet project with internet connectivity to gain the benefits of using ICT [17].	-To develop the Government Information Network (GINet) for data sharing among government agencies -To secure the security and safety of data interchange	The government	The National Information Technology Committee (NITC)	-Thailand Development Research Institute -The National Electronics and Computer Technology Center -The Ministry of Science, Technology & Environment	1997 – 2002	GITS helps bridging digital gap by providing cheap access to Internet. GITS supports government information network that allows government agencies to share and exchange data until the present. It also provides service CA, network application, and system integration.
4 Internet Tambon	IT promotes the use of ICT in local governments, particularly the sub-district administration. The Ministry of Interior established the internet infrastructure by the collaboration with the Telephone Organization of Thailand Corporation PCL to provide an infrastructure that connects all sub-districts administration organizations throughout Thailand. The local authorities then have been asked to use the public services since 2004.	-To implement computers and peripherals at local authorities -To provide local community information on the internet	Local community and citizen	The Department of Local Administration Promotion, Ministry of Interior	-The Telephone Organization of Thailand Corporation PCL -The National Electronics and Computer Technology Center -The Department of Social Development and Welfare -Thai citizens in rural areas	2001 - 2003	This program is initially available for 1,000 Tambon in 2001, and more than 3,000 Tambon in 2002, and 3,724 Tambon in 2003. The project is a source to develop eTambon. It also links other two government rural eCommerce programs: ThaiTambon.com and OTOP.

Project	Description	Objective	Beneficiary	Agency	Partner	Duration	Status
5 ThaiTambon .com	It is the source of Internet Tambon data, which is a center to promote and support community entrepreneur [15]. Its main charter is to provide at the sub-district level a comprehensive database holding information about transport, government public service, local products and industry information sharing, tourism, hotels and restaurant. In addition the website is used to promote local products for every Tambon (OTOP Brand) and act as a commercial hub for trading the products.	<ul style="list-style-type: none"> -To develop the community economic by linking rural product to OTOPT -To develop new marketing system -To promote the cooperative among business, agriculture institute, and local community -To increase the efficiency of production by research and learning from local knowledge -To promote agriculture industry that best fits to the local needs 	Citizens	The ThaiRakThai Party	<ul style="list-style-type: none"> - Department of Community Development, Ministry of Interior - Department of Export Promotion, Ministry of Commerce 	1999 - present	<p>Its current situations are</p> <ul style="list-style-type: none"> -7,407 tambon being posted (about 98% of Thailand's tambon). -51,330 product listed. -The encouragement of the use of English context for eCommerce products with the cooperation of the Department of Export Promotion. -A system can link to the SME homepage, which can promote the potential local products and services to the global markets.
6 Thai Rural Network	This is a program initiated by Thai students who want to give a chance for rural people to access ICT [18]. It was sponsored by a group comprising international authorities, private sector, government agencies, and NGOs. ThaiRuralNet helps support the maximization of Thailand's rural sector entrepreneurial capabilities by using digital technology as a business	<ul style="list-style-type: none"> -To achieve ICT-driven sustainable rural community development -To raise the level of awareness among youth groups in terms of rural development issues -To establish consultants specialized in ICT solutions for the rural sector. 	People in the rural area	Youth and Development Alliance, Students from Thammasat University	World Bank, UN-ESCAP, Access Capital AU System, Bloomberg, Boston Consulting Gr, Compaq, Thammasat University, The Ministry of Agriculture & Cooperation, NGO [18]	2001 - present	<p>ThaiRuralNet has four proposed solutions that it has implemented:</p> <ul style="list-style-type: none"> -eChaoban Rural-ICT Suite: It will enable rural communities to access product information. The system also enables the transfer to storage of local practical and cultural knowledge. -eCommunity based tourism project. To help local communities preserve their cultural heritage. - Young eTrader for rural development program. Develop young eTrader to trade rural products via eCommerce. - Youth network development cluster.

Project	Description	Objective	Beneficiary	Agency	Partner	Duration	Status
7 One Tambon One Product (OTOP)	This project to encourage people in every Tambon to create a product that represented the wisdom and culture of the community in order to generate extra income. The Royal Thai Government has provided them with technical assistance to enable them to produce goods more efficiently, and has also assisted them in marketing their products throughout the country and around the world.	To develop local community capacity, e.g. job creation, income, and local products and services	Grassroots	National One Tambon One Product Committee	Thais in the local community	2001 - present	The project has achieved a remarkable success, exceeding the Government initial expectation. The project became well established, the income raised to 24 billion baht, 33 billion baht, and 46 billion baht in 2002, 2003, and 2004 respectively. The living standards of people have consequently improved. At the present OTOP village champion, province star OTOP, and OTOP product champion have been set up to promote OTOP quality. However, OTOP will give benefit to those who already have their business and those who want to find their market [19]. Due to the poor data, many OTOPs also fail to achieve their goals due to poor products quality, redundant products, and poor marketing.
8 The Smart Card for Three Provinces in the South of Thailand	It is a tool to help dealing with the insurgency in the deep South of Thailand. Some problems in the South are concerned with identifying people who holds two nationalities. Some of the people are involved in the violence and problems may be foreigners sneaking into the area illegally. The government wants to identify persons who they are, and whether or not they are Thai.	<ul style="list-style-type: none"> - To keep the citizens person data who live in three provinces of the South of Thailand - To keep the fingerprint of related citizens for government eService - To support information to investigate the terrorism in three provinces in the South of Thailand 	The government and citizen	Ministry of Interior	The National Registration System Integration and Reform Commission Ministry of Information and Communication Technology	2005-2006	70% of this project has been implemented by the end of February 2006. This smart card program will allow citizen to easily access government services. This will also support eCitizen program.

4. Analysis of Policies and Programmes Selected

4.1 Analysis of Success in Implementing Objectives

Based on IT2010 policy emphasizing on the quality of life and a development of caring society, eight programmes were selected and explained in section 3. Some programmes, such as “RakBanKerd” web portal, government information technology service, Internet Tambon, ThaiTambon.com, Thai rural network are complete, whereas others are under construction and improvement. Mainly these programmes have achieved their objectives. The nationwide poverty registration project serves as the fundamentals of providing the data-information-knowledge of the poor to support life improvement at the grassroots level. This also provides a country fact. The “RakBanKerd” web portal is created to collect related government data. The government information technology service has met its goal for providing a channel to access the government information network (GINet). This also functions as a collaboration tool, e.g. data interchange, among government agencies. The Internet tambon and ThaiTambon.com are the key government success strategic tools to help the poor and the disadvantaged groups by providing an access to Internet and government related data. For student’s volunteer, the Thai rural network has been developed and deployed as rural community ICT tools for facilitating their living and social improvement. These also help bridging the digital divide. The use of ThaiTambon.com for promoting one tambon-one product (OTOP) has achieved its initial goal; however, OTOP is not successfully implemented due to the quality of products and management. This raises a new issue that the government should cleverly employ ICT to provide data-information-knowledge for decision making. Like management in many developing countries, the government programme is managed by persons without stressing on the use of ICT as a strategic tool. Finally, the smart card project for three provinces in the South of Thailand is rushed out in order to help support data-information-knowledge and government eService to reduce the political conflict that degrade citizens’ life quality and economic in that area. This smart card project is still in progress.

4.2 Emerging Issues and Challenges

The need of information system for all programmes in helping the poor and the disadvantaged groups should be implemented to support the transparency and openness concepts and to give experience to all. If the central and local governments want citizens, businesses, and NGOs to help monitor their progress, this might help.

Due to the lack of direct eGovernment policies to support poverty eradication and to help the disadvantaged groups, many policies and programmes are on an ad-hoc basis. This leads to the construction of many micro and piece-by-piece ICT tools. The government has already realized the problem concerning the weakest groups; therefore, the national economic and social development plan IX has addressed this as one of the key issues. Consequently, the government has set up the National Center for Overcoming the Poverty which is a complex issue. This problem cannot be easily solved with ICT. Therefore, the government should have a macro “integrated strategic ICT tool” to support the life cycle of poverty alleviation and eradication of the disadvantaged groups’ problems. This integrated strategic ICT tool should provide the national “data-information-knowledge map” that gives the broad and deep details of such problems. The GIS for the poor and the disadvantaged groups is a government idea to provide such a map. Furthermore, the necessity of developing national ICT master plan emphasizing on the poor and the disadvantaged groups should also be considered as a long term plan.

4.3 Unfulfilled Expectations

Most ICT programmes for the poor and the disadvantaged groups mainly support the business process automation of government daily work. They hardly support the government process improvement and reengineering. The necessary project indicators have not been declared. The qualitative indication is also important to measure the real success. Furthermore, the lack of concise eGovernment framework for the poor and the disadvantaged groups makes it hard to learn how ICT should be deployed. Each project is developed using piece-by-piece approach, and it cannot draw the whole picture of this matter. The lack of experience on eGovernment and eService, especially for the poor and the disadvantaged groups who need more ICT care is also the main concern. There is no figure of those using the above projects; only the hit-rates which cannot show the success of poverty eradication or helping the disadvantaged groups. In addition, the problem of out-of-date data-information is another main problem that makes almost 70 % of Thai Internet users dissatisfied with the government websites [20].

The use of ICT still cannot support solving country key problems since it cannot be successfully used to decrease such problems. Many ICT projects are used as tools for informing data. Consequently, the data is always not up-to-date. These projects mainly show the interaction and interchange transactions; however, they hardly provide the integration and intelligence system.

5. Detailed Discussion on Impacts and Implications of Policies / Programmes on the Poor and the Vulnerable and Marginalized groups

5.1 Economic Impacts - Livelihood and Income

In fact, 48 % of the tax budget is use for nothing [21]. This makes eGovernment budget higher than usual. Due to the secret data each ICT project does not announce its cost of the system development and deployment. It is hard to do a cost-benefit analysis of each ICT investment. However, using available data the use of eGovernment programs for the poor and the disadvantaged groups can be shown as follows. The use of government information system and web portal mainly supports the information, interaction, and interchange transactions. For example, the data of reducing consumption expenditure shows that the debt moratorium for 2.31 million small farmers costs 53,000 million baht. This helps increase their income 10,185 baht per year. After this programme the small farmers would continue suffering from life-long debt. Other examples of increasing the income opportunity are those programmes that support local development by providing funding for villagers, such as village and urban community fund, people's bank, transferring asset to fund, SME bank, and SML (village and community development fund). There are 13.9 million villagers and urban people participating in this fund with 168 billion baht loan. The result came out that some villages and urban communities had not been successful in managing sustainable eCommunities because they have not found their suitable business models. Furthermore, the present economic and social environment encourages the poor to get loan for improper usage, which cannot promote village economic growth. Some citizens are still poor and do not have the right way to improve their economic status. Consequently, their debts cannot be paid to the village fund within time.

The government web portal and eCommerce, e.g. ThaiTambon.com and OTOP do not support the whole online transaction, it acts more like an online brochure which potential buyers can browse and create their orders, telling the suppliers what they want to buy. The actual purchase, i.e. the payment, is done offline, using other traditional payment methods, not ePayment. However, having this website as an information portal for OTOP products can help increase the sale volume as it is easier for buyers to find what are available and who to contact if they want to buy those products. Not all OTOP products can be ordered online.

The website ThaiTambon.com can be useful as an information resource for not only the buyers, but also the sellers. The manufacturers can learn more about their competitors, e.g. who make similar products, where they are, and how much the price of related products. Furthermore, the part of the Internet Tambon can also give an opportunity for the OTOP manufacturers to learn more about the market. Using the internet, the manufacturers can find the information on global competition, hence able to adapt to the competition, and faster respond to ever changing markets.

5.2 Social impacts - Health, Education, Social Status

The weakest groups' problem causes more digital divide. To promote the use of eGovernment, they must equally have access to Internet with affordable price. Most of them have less education and less or no ICT skills; therefore, the usability of eGovernment system must be taken into account.

The government eCommerce, e.g. OTOP, can help strengthen the sense of community as the products are produced locally by local people using local materials and knowledge. The website ThaiTambon.com gives extra support to the cooperative and the disabled by providing specific sections for the cooperative products and the products by the disabled. This may make local people see more financial benefits of forming cooperative, i.e. the products produced under the cooperative name can draw more attention and sales. Then through local cooperative and its activities, local people may have stronger sense of community. For the disabled, a specific section on the website for their OTOP products may help draw more attention from the buyers and then generate more income for them.

Not only the cooperative and the disabled group would benefit from the website ThaiTambon.com, the OTOP project can also benefit women. Lots of the OTOP products are initially produced by local women groups as a way to earn extra income. However, with the promotion of OTOP by the government and the website, the production becomes more business oriented and perhaps brings the main income for the family. Women then can become more financially independent, able to support their family by themselves, and rely less on their male counterparts. Socially, the women status is raised.

The part of the Internet Tambon can give an opportunity for local people to broaden their knowledge of the outside world. With the initial motivation to improve their OTOP business, local people learn to use the internet. They learn new technology. Later their use of the internet may span further than business purposes, but for learning about other things, which broadens their knowledge and helps them move toward the knowledge-based society.

OTOP project is in parallel to the debt moratorium for small farmers and the village and urban community fund. OTOP is used for creating the income, whereas the others are for providing additional fund. However, many OTOP products fail due to poor market, i.e. they cannot sales. The villagers do not have the business skills as the businessmen have. Dr Saree, the director of SME institute, said that only 5% of OTOP survive. The report from the Department of Community Development also addressed that only 7,945 products from the total 37,826 products passed the minimum standard. Furthermore, the debt moratorium

for small farmers came out with nothing and the small farmers are still in debt for life. The village and urban community fund also gave the same result.

5.3 Cultural Impacts

The face-to-face method is still a popular communication channel among government agencies, the poor and the disadvantaged groups. The use eGovernment system requires them to change the way their behave. The information provided by the system is the key benefits from using ICT; therefore, the government staffs and related persons must update their organizational data-information within time to keep data up-to-date. The new way to learn, work, and live using ICT may make some unskilled ICT personnel feel uneasy or panic about using the eGovernment system.

6. Detailed Discussion on Improving the Interface with the Beneficiaries and Community Participation - Experience to Date, Ongoing Measures, and Future Directions

6.1 Participation by All Groups

The development and deployment of eGovernment system need participation from all stakeholders. The government mainly gives the financial support. The Department of Local Administration Promotion and the Community Development Department, Ministry of Interior are the main government agencies that help improving the quality of life and society in the rural areas. The Ministry of Social Development and Human Security helps support the poor, homeless, the old, disabled, and marginalized groups to release their problems. The Ministry of Science and Technology employs GIS and remote sensor to survey the national resources, e.g. land and water to manage and reform their usages. The private sectors and NGOs take part in this by gathering and providing the data of the poor and the disadvantaged groups via web portal. Most eGovernment projects are the back-office system. The poor and the disadvantaged groups, who lack a chance and knowledge of ICT, rarely involve in these projects, even though they should get the real beneficiary.

6.2 Participation of Weakest Groups - Women and Marginalized Groups

People want to get the government they deserve; however, the weakest groups do not normally know how to use their right to select a good government. Similarly, they do not know how to participate in eGovernment projects. Hence, the way of solving the digital divide can reach those with some economic power, not the poor and the disadvantaged groups. In particular, only a small portion of people can have access to the phone due to its unaffordable cost for the poor.

6.3 Domination by Selected Stakeholders

The government coordinator has been set up as a hub to provide the complete cycle or integrated way of poverty eradication and helping the disadvantaged groups. Previously the National Poverty Eradication Center has been established for this purpose. This center has surveyed the poverty throughout Thailand by nationwide poverty registration information system. The survey also showed the problem of both formal and informal debts. In 2005, the

government has set up a new unit called the National Command Center against Poverty directed by an ex-prime minister. This center aims to help solving the poverty problem to improve the quality of life within 2009. In addition, the Department of Local Administration Promotion, and the Community Development Department, Ministry of Interior, are the main agencies to solve the poor and the disadvantaged groups' problems.

6.4 Empowering the Weakest

With ICT government is able to improve the life quality and provide services to the poor and the disadvantaged groups, which require an empowerment. The instruments for empowerment and participation are provided by the way of services and offers that are contributed by eGovernment. To empower the weakest, good government is required before eGovernment. The framework of good government can be viewed as having the following concepts: eAdministration, eService, and eDemocracy. Next, the participation from the weakest is required in order to learn how to give them the right services delivery. The data-information-knowledge of public sectors relating to the poor and the disadvantaged groups should be carefully built. This will promote a knowledge based economy and society by enhancing government agencies, citizens, businesses, and NGOs cooperation. The weakest needs careful help; therefore, an access to service and information should be improved and should have multiple channels. Finally, the central and local governments should support policies and programmes for truly solving the poverty and helping the disadvantaged groups so that they will not return to this suffering cycle.

7. Detailed Discussion on Conflict Resolution and Management among the Stakeholders

Management and stakeholder is one of important aspects of eGovernment development frameworks. To get it fast-right-cheap is the key model to build robust eGovernment system. However, this goal is hardly achieved due to the following.

1. Leadership and Political Support
 - Inexperience and unskilled eGovernment leadership
 - Lack of “strong” political commitment and continuous support
 - Insufficient financial support
2. eGovernment Policy Maker
 - Unclear eGovernment policy for poverty eradication and helping the disadvantaged groups
 - Unclear eGovernment key performance indicator (KPI)
 - Outsource contract cannot deal with everything. The government spends less time working with the outsourcer, so the eGovernment project delay becomes significant and uncontrollable.
 - Do not produce e-Government just for serving old work, but it should concentrate on knowledge base by using the capacity of ICT
 - Lack of shared information system resource and knowledge
3. Bureaucratic Structure and Interoperability
 - Hierarchical administration, called “KunNang” system causes low performance in public services.
 - Poor interoperability, i.e. collaboration, fragmentation, and unity

To overcome the above problems, the strong leadership on eGovernment should be developed. The politics should give a continuous support, especially sufficient finance. The need of national eGovernment policy for poverty eradication and helping the disadvantaged groups should be identified. KPI is also required for eGovernment measurement. All related government agencies should be restructured and interoperate to unify the eGovernment requirements, and share IS resources.

8. Detailed discussion in capacity gaps

8.1 Individual Capacities (of Personnel)

Due to shortage of ICT personnel, eGovernment system has a limitation of this capability. The government staffs who have less ICT skills can get training to use eGovernment for supporting better administration. However, the poor and the disadvantaged groups, who should directly gain benefits from eGovernment and are the real end users, do not normally have access to Internet. They cannot afford money to buy ICT. They also do not have sufficient ICT skills or have a chance and convenience way to access an Internet. This is a challenge for the government to promote and support eGovernment for these target groups to gain benefits of eService, which is beyond the scope of this work.

8.2 Institutional/Organizational Capacity

The successful use of eGovernment for poverty eradication and helping the disadvantaged groups must be fully supported by responsible agencies. Such agencies should have sufficient and workable IS resources, e.g. hardware, network, data-information, software, and skilled ICT personnel. Due to less knowledge of ICT, even though each agency gets sufficient budget she cannot implement reliable and complete eGovernment. Furthermore, the use of ICT requires each agency to reform the way of working. Note that to become the learning agency, the need of public reengineering is required to change the way they work including heart, soul and spirit. Some agencies with ICT shortage hire outsourcers to develop eGovernment. This can be fast building eGovernment; however, the knowledge has been transferred to outsourcers if such agencies do not have the concise policy to deal with this concern.

8.3 Strengths and Shortcomings of Ongoing Capacity Building Activities

The strengths of ongoing eGovernment development are the government's support, an awareness of ICT power, pre-installed ICT infrastructure, existing data-information-knowledge, and spirit to help solving problems of the poor and the disadvantaged groups. All stakeholders realize the important of solving these problems to support the country development, so they give participations on this.

To develop eGovernment, eParticipation is required. Many agencies need to help developing eGovernment; however, they have insufficient collaboration on this matter. For example, the top administrator of each agency gives less support on eGovernment project by sending the representative who has no power for decision making to attend the eGovernment project meeting. This might be that s/he does not have sufficient ICT

knowledge. eGovernment needs integrated work from related stakeholders. Interoperability is required for this development.

9. Conclusions and Recommendations

9.1 Summary of Key Points Related to Success Factors, Challenges, and Areas of Potential, and Capacity Gaps

Thailand has claimed to be a successful country that overcomes the poverty and the disadvantaged groups' problems. Many success factors that are used for solving the problems are the national economic and social development plan, IT2010 plan, the government policy, ICT resources, and stakeholders' participation. The Prime Minister Dr Thaksin Shinawatra gives strong support to poverty eradication and helping the disadvantaged groups, which aims to achieve the millennium development goal (MDG) goals. The challenge of using eGovernment is to help support better government administration and better services to citizens. However, eGovernment policy does not mainly focus on the poor and the disadvantaged groups. The policy does not have the specified beneficiary. eSociety and eCommerce in IT2010 partly help the poor by improving their living condition and finding market for local products. The eGovernment policy for poverty eradication and helping the disadvantaged groups is in an infancy stage.

Many projects are planned during the election, so they lack ICT tools to help support the process of measuring their successes. For example, the village and urban community fund project fails in many places due to less education, training, and data-information-knowledge support. Hence, eGovernment are not completely and correctly used in such projects. The government wants to delegate the budget directly to the grassroots without sufficient tool to control their usages and progresses. Furthermore, there is less cooperation among stakeholders, i.e. the work is a piece-by-piece approach. Therefore, "interoperability" is a potential area of using ICT to collaborate related work. Beyond the existing use of eGovernment for gaining information and some interactions and interchanges (transactions), the integration and intelligence levels should be considered.

To decrease the digital divide between the rich and the poor who do not have access to ICT, Internet Tambon, and Thai rural network were developed for this purpose. The poor tend to be in the disadvantage of using eGovernment due to the cost of ICT services, and unskilled in ICT; therefore, the government should help bridging this gap. To help support the poor and the disadvantaged groups, the government has first identified the poor by the national poverty registration system to gain the data-information-knowledge of the weakest. To provide better eService the development of friendlier ICT is a must. Hence, the poor and the disadvantaged groups are encouraged to use user-friendly eGovernment with less operation cost. In conclusion, the government has employed eGovernment for help improving the quality of life by the poverty registration, and for caring the quality of society by bridging the digital divide, supporting local eCommerce (OTOP), providing grassroots information via government web portal (ThaiTambon), and decreasing the violence from the political problem with three provinces in the South of Thailand using a smart card.

9.2 Recommendations on improved targeting of the weakest groups, increasing participation of beneficiaries, improving the interface with the community, and building capacity

The poor and the disadvantaged groups have less economic and social opportunity. They do not directly get benefit from eGovernment policy. This increases the digital divide between the rich and the poor. The successful deployment of eGovernment requires the basic skill of ICT; therefore, the government should pay more attention to the poor and weakest groups to improve them to be eCitizen. This requires the culture change in government operations. To increase the participation of beneficiaries, the better government services for the poor and the disadvantaged groups should be provided. The use of eGovernment is also to increase an access to globalization, for example, to gain better economic opportunity in term of better integrated and competitive product market. The concept of “citizen center” should be the main goal for eGovernment service. Thus, the strategies of Thailand’s bureaucratic system development containing process redesign, organizational restructuring, financial and budget control, human development, culture and ethics, eGovernment, and citizen participation should help improving the weakest groups.

The need of collaborative ICT tools, e.g. email, chat, and web-board, is to improve the communities’ interface, and to interoperate work among communities, local and central governments. Employing eGovernment for intensive public acknowledgement, all services should be found on one web page. For further capability building, the key performance indicator (KPI) should be set up for eGovernment project for the weakest. Citizens prefer having something to measure rather than nothing. Some KPIs, such as the weakest and social satisfaction indicator, cost-performance, development time, and reliability and trust, should be carefully set up to assess the success ratio of eGovernment development and deployment. These KPI can be used by cyber inspectors to help improve the eGovernment investment. Another concern is setting up the standard for eGovernment management and development. The back-office information system for the poor and disadvantaged groups should also be developed for prompt help and future management. The need to build trust on eGovernment is inevitable. The Thai government has established the National Command Center against Poverty to manage the whole themes of sustainable reduction of the weakest groups’ problems. In conclusion, concerning the government programmes for poverty eradication and helping the disadvantaged groups, eGovernment must be used for solving the community problems by putting them in the place where community members can appreciate and use them for their production, marketing, accounting and promotion of trade. Once the income of the communities increases, they themselves are the source of purchasing power, which will drive developing further economies. The use of eGovernment without planning for building eCommunity will gain less benefit. Therefore, it is a challenge to find out a suitable business model for each local eCommunity for sustainable development that will permanently solve the above problems and will help achieve Asian-Pacific or universal eGovernment collaboration. As a result the success use of eGovernment for helping the weakest must consider the aspects of management and stakeholder, eGovernment development methodology, business driver such as interoperability, globalization, and enterprise application integration, and information technology.

Reference

- [1] TRN and A. Puntasen. ICT for Poverty Alleviation: the case of Thailand, UN-ESCAP Commissioned Report, 2001
- [2] Phontip Warunyooratana, The Ministry of Information and Communication Technology, Country Report – Thailand, Regional Workshop on Managing Sustainable eCommunity Centers, India, 4-10 May 2005
- [3] www.egov.go.th

- [4] Research Center, KasikornThai Bank. in <http://positioningmag.com/prnews/prnews.aspx?id=23700> 29/7/04
- [5] The Government Information Technology Services. in <http://www.gits.net.th/knowledge/newsletter/specialreport/index.asp?MenuID=27&RootMenuID=8&Book=7>
- [6] P. Smutkupt and K. Pooparadai. ICT Indicators Initiative in Thailand: Progress and Lesson Learned, The National Electronics and Computer Technology Center (NECTEC), 2005
- [7] Samart Chokkanaopitak. Director of the Royal Irrigation Department, The bureaucratic Reform and New Work Operation 2003 (in Thai)
- [8] The National Statistics Office in http://poverty.nesdb.go.th/poverty_new/doc/news/wanchat_20050824043205.pdf
- [9] The National Economic and Social Development Board, Poverty and Income Distribution, in http://poverty.nesdb.go.th/poverty_new/default.aspx
- [10] UNDP. MDG-Plus: A Case Study of Thailand, in www.undp.org
- [11] United Nation. Global e-Government Readiness Report 2005: From eGovernment to e-Inclusion, New York, 2005
- [12] The National Economic and Social Development Board, Poverty and Income Distribution, in http://poverty.nesdb.go.th/poverty_new/doc/NESDB/wanchat_20050426033830.pdf
- [13] Research Community, in <http://rescom.trf.or.th>
- [14] Nation Weekend, Econ Focus: Fact about Thailand, 14(699):23, Oct 24, 2005.
- [15] ThaiTambon Dot Com, in <http://www.ThaiTambon.com>
- [16] www.RakBanKerd.com
- [17] The Government Information Technology Services, in www.gits.net.th
- [18] www.ThaiRuralNet.org
- [19] Manager news paper. Artificial OTOP, Jan 25, 2006. in www.manager.co.th
- [20] www.egov.vic.gov.au/International/asiathepacific/Thailand
- [21] Don Tapscott. Digital Economy: Promise and Peril in the Age of Networked Intelligence, McGraw-Hill, 1996

Brief Biodata

Assoc. Prof. Wichian Chutimaksul received his PhD from the University of Sheffield, U.K., in 1994. Now he works as a senior associate dean for academic affairs at the School of Information Technology, King Mongkut's University of Technology Thonburi, Bangkok, Thailand. He is also the director of PhD programmes in Information Technology, and Computer Science, and M.Sc. programmes in Information Technology, and eBusiness. His research is in the areas of software requirement elicitation and development methodology, object-oriented technology, and eGovernment modeling. He also takes part in social services, such as being a school representative in the university academic committee, an external academic expert in some private universities in Thailand, and a member of IFIP 8.5 working committee.