

CHAPTER 1

BACKGROUND AND RATIONALE

1.1 A brief history of Thailand

A community is defined not only by geography, but by common experience, feeling and the relationships amongst people who have lived and worked together socially, economically, and politically over a long time. Some nations may consist of several communities. This is arguably the case in Thailand. Nevertheless nations may be dominated by particular institutions or may be ruled by particular people. I recognize that social groupings such as a nation and a community can be unique in some ways whilst sharing the potential for harmony based on recognition of common human and environmental needs.

Some Thai people may feel dominated or ruled by particular institutions or people, particularly if they are part of the Muslim southern communities who see themselves as Malays¹. But the majority (who are Buddhist) see themselves as Thais and their lives and work have been inspired by two unique institutions and their representatives in the land of Siam: religion and the Siamese monarchy for more than 800 years. The representatives of the land of Siam are all Thais. Buddhism, the core religion of Siam, ideally aims to create and apply mutual understanding, knowledge and wisdom as the basis of life and then to live in harmony with diverse people, for instance those Christians, Muslims, Hindus and others in the country. The reality, however, as discussed in later chapters, is that there are tensions between diverse groups. The King and the people all belong to the Siam monarchy. This is a network of national relationships which people and institutions have to work together to nurture, but which also have to respond to change to meet the needs of diverse people.

Thailand has a population of 65,444,371.² Administratively, the country is divided into 76 provinces which are subdivided into 774 districts, 81 minor districts, 7,255 sub-districts (called *Tambon* in Thai), and 69,866 villages. Each Tambon is administered by a Tambon Administrative Organization (TAO, or *oboto* in Thai). About two thirds of the populations live in rural areas, the other third in areas classified as urban.

¹ AAP 2005 Landslide win for Thai premier <http://news.ninemsn.com.au/article.aspx?id=37227>

1.2 An overview of socio-demographic details and life chances of diverse citizens

Socio-demographic factors of a country characterize the life chances of diverse people. Life chances refer to their opportunities in life to achieve good quality of life. The socio-demographic details include some statistics linked to age structure, gender, religion, culture, literacy, level of income, labour force, unemployment rate, and level of physical and mental health including birth and death rates. Some important factors of Thailand's socio-demographic patterns associated with life chances of diverse people are shown in Table 1.1 below. My case study includes a sub district called Nam Pun and 11 villages. It is in the Northeast region which scores lowest in terms of 6 of the 7 socio-demographic and socio-economic indicators amongst the six regions including Bangkok. The following table gives detailed life chances across Thailand for life expectancy, mental illness, persons per hospital bed, household income, enrolment rate, educational attainment, persons per telephone line, and Internet access; but for some indicators it was not possible to obtain detailed information for each region.

² CIA. (2005). *The World Factbook*. Retrieved January 10, 2005, from <http://www.cia.gov/cia/publications/factbook/geos/th.html>

Table 1.1: Some socio-demographic factors associated with overall life in Thailand

Socio-demographic factors	
1. Age structure:	<p><i>0-14 years: 23.9% (male 7,988,529/female 7,633,405)</i></p> <p><i>15-64 years: 68.6% (male 22,195,625/female 22,731,767)</i></p> <p><i>65 years and over: 7.5% (male 2,251,112/female 2,643,933) (2005 est.)</i></p>
2. Birth rate: Death rate:	<p>15.7 births/1,000 population (2005 est.)</p> <p>7.02 deaths/1,000 population (2005 est.)</p>
3. Health Life expectancy at birth (years) (1996) Mental illness per 1,000 pop.(2001): Persons per hospital bed (2000):	<p>Total population: 72.2 (<i>male: 68.5, female: 76.1</i>) (Bangkok, 73.8; Central, 72.6; East, 72.1; West, 71.1; Northeast 72.4; North, 68.5; South, 76.3)</p> <p>Total: 22 (Bangkok, 6; Central, 29; East, 9; West, 19; Northeast 30; North, 23; South, 17)</p> <p>Total: 454 (Bangkok, 202; Central, 431; East, 412; West, 432; Northeast, 766; North, 493; South, 494)</p>
4. Religions:	Buddhism 95%, Muslim 3.8%, Christianity 0.5%, Hinduism 0.1%, other 0.6%
5. Labour force 2001: Labour force by occupation:	<p>33,483,724 (Male: 18,470,993;Female: 15,012,732)</p> <p>Agriculture 49%, industry 14%, services 37% (2000 est.)</p>
6. Unemployment rate: Underemployment rate:	<p>896,308 (2.6%) (2001)</p> <p>762,209 (2.3%) (2001)</p> <p>Male: 482,032 (2.6%), Female: 280,177 (1.9%)</p>
7. Population below poverty line:	10% (2004 est.)

8. Household income (Baht/month)	Total: 11,988 (2000) (Bangkok, 26,831; Central, 12,464; East, 11,991; West, 12,849; Northeast, 7,604; North, 8,422; South, 11,012)
9. Education Enrolment rate 2000 higher secondary (%): Education attainment 2001 (Tertiary) (%) Literacy rate 2002 (%):	Total: 52 (male: 50.2, female: 54) (Bangkok, 58.2; Central, 61.5; East, 58.2; West, 52.6; Northeast 45.7; North, 55; South, 54) Total: 11.9 (Bangkok, 28.3; Central, 10.2; East, 10.1; West, 9.2; Northeast 7.0; North, 8.7; South, 10.7) <i>definition: age 15 and over can read and write</i> <i>total population: 92.6 (male: 94.9, female: 90.5)</i>
10. Communication Persons per leased line (2002): Internet access 2000 (household):	Total: 10 (Bangkok, 2; Central, 12; East, 10; West, 15; Northeast 35; North, 15; South, 16) Total: 14.1% (Bangkok, 34.4%; Central, 11%; East, 14%; West, 11.6%; Northeast 7.4%; North, 12%; South, 12.5%)
11. Population 2001:	62,308,887 Male: 30,913,485 (49.61%) Female: 31,395,402 (50.39%)

Source: This table is constructed and adapted from CIA (2005) and UNDP (2003)

These indicators shown in the table 1.1 portray the diversity of life chances of people who live in different regions in Thailand. Life expectancy at birth, a number of persons per hospital and mental illness per 1,000 populations shown as physical and mental health status indicators confirm that life chance of people in the Northeast region is lower than of people who live in other regions. For example, in 2001, the number of people who suffered mental illness per 1,000 populations were 30, 29, 23, 19, 17, 9, 6 in Northeast, Central, North, West, South, East and Bangkok respectively; whereas the number of persons per hospital in the Northeast was at 766 compared to 494, 493, 432, 431, 412 and 202 in South, North, West, Central, East and Bangkok.

Other significant social indicators of well being and life chances are income index (household income) and education indices (enrolment rate at higher secondary school and education attainment at tertiary). In 2000, the average household income of people in the Northeast was 7,604 Bath per month which was the lowest rate of income earning in comparison to other regions. Also, the rates of enrolment 2000 higher secondary school and of education attainment 2001 at tertiary level, the lowest rates of these two education indices occurred in the Northeast region, in particular only the education attainment rate of this region, 7, was under the national rate of this index, 11.9.

In addition, information and communication infrastructure indicators such as the number of persons per telephone line and the percentage of internet access per household which are important indicators showing the life chance to people to access to public facilities including being networked or connected in information sources. On average there were 35 persons per telephone line in the Northeast in 2002. This was the highest number compared to 16, 15, 15, 12, 10, and 2 in the South, North, West, Central, East and Bangkok respectively. Moreover, in 2000, the lowest percentage of household, at 7.4, which was able to access to the Internet was in the Northeast whereas the percentages of this index in other regions were more than 10 and it was up to 34.4 in Bangkok metropolitan.

This is the justification for choosing the Northeast as my case study area. One of the main reasons I have selected my case study area is because of the divided life chances. The indicators (of poverty and access to digital connections) showed a divide

in life chances so the divide and the digital divide³ are the basis for making a decision as to where I would like to undertake my research.

1.3 An economic context of the wider world and its globalization

Globalization is ‘the process whereby political, social, economic and cultural relations increasingly take on a global scale, and which has profound consequences for individuals’ local experiences and everyday lives’⁴. For Giddens, Globalization is ‘a multi-causal and multi-stranded process that is full of contingency and uncertainty’ and it is also ‘a process of uneven development that fragments as it coordinates’⁵. Walters describes that the globalising political, social, economic and cultural activities which set up ‘global linkages’ and ‘systems of exchange’, tend to reduce time and space (as global maps) of ‘human activity’ across the globe.⁶ Human activity, especially a process of the world economic transactions run by ‘trans-national corporations’, has profoundly affected the overall development of a nation worldwide.

To deal with the globalizing processes, during the four decades since 1960 Thailand set up the National Economic and Social Development Board (NESDB) to develop its national planning to promote the economic growth rate. One of the obviously good results was a sharp reduction in the poverty rate. However, when the 1997 Asian economic crisis, as a multi-causal process of uneven development of globalization, impacted on Thailand, all people, both planners and ordinary people, realized that there were many things wrong in our way of development even though they were satisfied with the success of economic and social improvement. This might be an *imbalanced* or *unsustainable* development. The poverty now has increased (see Table 1.2).⁷ The economic crisis has lead to profound effects in both negative and positive ways, of social and political areas across the nation. According to the 2000 household survey, 14.2 percent of the population lived below the poverty line

³ Compaine states that digital divide “refers to the perceived gap between those who have access to the latest information technologies and those who do not”. In information age, those who cannot access to information resources that exist and are being created by the new technologies are considered at some extents to be a ‘handicap’. Meanwhile, those who can do will have more opportunities to take full advantage of the information and knowledge resources and then ‘further their distance from those who do not’. More details see Compaine, B. M. 2001. *The Digital Divide: Facing a Crisis or Creating a Myth?* Cambridge: MIT Press, p. xi.

⁴ Bilton, T., et al. (1996), *Introductory Sociology* (3rd ed.), Hampshire: Macmillan., p. 660

⁵ Waters, M. (2001), *Globalization* (2nd ed.), London: Routledge, p. 62

⁶ Ibid.

⁷ Thailand Development and Research Institute (2000), *OECD/DAC Dialogue with Developing Countries on National Strategies for Sustainable Development*, Phuket, Thailand, [Online Accessed: 18 August 2002], <http://www.tdri.or.th>

compared to 11.4 percent in 1996.⁸ However, statistically, the percentage estimated that it would go down to 10 in 2004.⁹

Table 1.2: Incidence of Poverty in Thailand (1988-1998)

Period	Percentage of the poor	Percentage of the Ultra Poor ¹⁰	Poverty gap ratio	Number of the poor in millions
1988	32.6	21.8	10.4	17.9
1990	27.2	17.0	8.0	15.3
1992	23.2	14.2	6.8	13.5
1994	16.3	9.3	4.3	9.7
1996	11.4	6.1	2.8	6.8
1998	12.9	7.0	3.2	7.9

Source: NESDB 1999 cited in TDRI (2000, p. 14)

The digital divide in the nation is another example of the imbalance in development influenced by globalization. Thailand seems prone to the social and economic gap implied in the digital divide because of the differences between urban and rural infrastructure, and the different life chances of young and old, rich and poor. According to ITU's survey¹¹ in 2000, the great majority of internet users, around 71 %, are in Bangkok with only 19% and 9% respectively in other urban and rural areas (and 1% abroad). 90 % of Thailand's internet users are in urban areas even though they only account for around one third of the population.

Teledensity (telephone lines per person) in Thailand's different regions is another possible indicator of the nation's digital divide. For instance, in 2001, the average teledensity in Bangkok was 0.36 lines / person whereas in the East, Central, West, North, and Northeast regions it was 0.08, 0.06, 0.06, 0.05, and 0.025 respectively.¹² This low teledensity leads to a national internet penetration of only roughly 3%.

⁸ ITU (2002), *Bits and Bahts: Thailand Internet Case Study*, International Telecommunication Union (ITU), p.2

According to *Thailand Human Development Report 2003* (<http://www.undp.or.th>), p. 144, the country's poverty line is 882 Baht/person/month. At the time of writing, AU\$ 1 equals roughly 30 Baht.

⁹ CIA, op cit.

¹⁰ Note: Defined as a household whose income is below 80% of the poverty line.

¹¹ ITU, op cit. p. 25

¹² Amin, M.M. & Rodjanapiches, N. (2001), *Accelerating E-readiness in Thailand: A case study*, World Bank.

The establishment of the National Economic and Social Development Board (NESDB) in 1960 is one of the best examples showing that the nation prepared to deal with the challenge, opportunity, and risk created by globalization. Globalization has brought profound changes which can be both negative (such as the 1997 economic crisis) and positive (such as increasing awareness and efforts to bridge the digital divide for the poor). The new technologies and the globalization of business in a world market are the most significant driving forces of the changes.¹³

During the past decade, globalization based on the rapid progress of new technologies has carried some important changes to the interrelations between people and their institutions at different levels, both positively and adversely affecting many countries, including Thailand:

1. At the individual level: culture shock, learning patterns;
2. At the community level: family and institutional breakdowns;
3. At the regional level: higher migration, societal crisis;
4. At the national level: economic crisis, unprecedented growth and change in modern society - business, government, public policy and education;
5. At the international level: profound change in industrial activity, stress on natural ecological system, increasing complexity and interdependence.¹⁴

Thailand prepared herself to confront these effects:

- a. Being a member of the World Trade Organization (WTO) and the General Agreement on Tariffs and Trade (GATT), Thailand has to change her agricultural policy, e.g. tariff system, farmer's subsidy, etc.
- b. As a member of the Association of Southeast Asian Nations (ASEAN) Free Trade Agreement (AFTA), Thailand has to change some restrictive measures, e.g. reduction of agricultural tariffs on processed and non-processed products.
- c. As a member of the Economic Hexagon Project, together with South China, Myanmar, Laos, Vietnam and Cambodia, the Thai

¹³ OECD (2001), *Information and Communication Technologies and rural development*, Paris, pp. 5,48, [Online, accessed 07 January 2002], <http://www1.oecd.org/publications/e-book/0401081e.pdf> and

Pilat, D. (1998), The economic impact of technology. *The OECD Observer*, Aug/Sep(213), p. 5.

¹⁴ Suthasupa, P. (2000), *Rural community development in Thailand*, Community Development Journal 35(1): pp. 75-83

government has to invest in infrastructure to support international markets.

- d. The rapid diffusion of the new technologies has made the protection of information difficult. The nation has to be ready for this challenge.
- e. The importance of natural resources conservation and sustainable agriculture is now widely recognized and natural resources are regarded as the properties of the world to meet the needs of future generations.¹⁵

Thailand, like other developing countries around the world, has searched for a development policy formula which can lead to sustainable growth and prosperity by adapting some successful development models from other countries, both developing and developed. However, the outcomes of using the development models have varied from one country to another. Leo Tolstoy, quoted by Kasemsuvan¹⁶, wrote that “*all happy families are alike, but each unhappy family is unhappy in its own way.*” Kasemsuvan recently claimed that even though Thailand has implemented successful development models and achieved development growth to some extent, she still has undesired results in socio-economic areas such as imbalanced development between¹⁷ rural and urban areas. Mass rural-urban migration and a neglected countryside are obvious in remote areas nationwide. This encourages Thai developers to look back for ways to strengthen the grassroots and correct the long-lasting imbalance. They recognized a development strategy, with an underlying concept building upon the inner strengths of culture and society of the nation, which had been overlooked by many former governments. This concept, of a balanced development strategy and initiated by His Majesty the King of Thailand, was called “Sufficiency Economy” based on Buddhist ideas which are called the Buddha’s Noble Eightfold Path in which one of the requirements of it, ‘Right Livelihood’, is an important foundation of ‘Buddhist economics’ coined by E.F. Schumacher in *Small is beautiful*.¹⁸ He differentiated the

¹⁵ *ibid.*

¹⁶ Kasemsuvan, S. (2004), 'New Challenges for Building Up Institutional and Human Capacity for Economic Development and Cooperation', *12th OSCE Economic Forum*, Prague, 31 May, [Online, accessed July 28, 2004], http://www.osce.org/documents/sg/2004/05/2966_en.pdf

¹⁸ Schumacher, E. F. (1973), *Small is beautiful: economics as if people mattered*, London: HarperPerennial, p. 56

materialist and the Buddhist economist that while the former 'is mainly interested in goods, the Buddhist is mainly interested in liberation and he also claimed that Buddhism is 'The Middle Way' and 'and therefore in no way antagonistic to physical well-being'.¹⁹

To deal effectively with the forces of globalization while protecting against inevitable shocks and effects that arise, the King advised the Thai people to change their economic philosophy from economic progress in the sense used by economic rationalists, in order to cope with present economic adversity and withstand future economic insecurity. This concept has been used as the guiding principle in the current 9th National Economic and Social Development Plan (2002-2006)²⁰.

1.4 Sufficiency Economy and the Third Way

The philosophy, as translated from Thai by Krongkaew, can be summed up in one paragraph:

Sufficiency Economy is a philosophy that guides the livelihood and behavior of people at all levels from the family to the community to the country, on matters concerning national development and administration. It calls for a 'middle way' to be observed, especially in pursuing economic development in keeping with the world of globalization. Sufficiency means moderation and reasonableness, including the need to build a reasonable immune system against shocks from the outside or from the inside. Intelligence, attentiveness, and extreme care should be used to ensure that all plans and every step of their implementation are based on knowledge. At the same time we must build up the spiritual foundation of all people in the nation, especially state officials, scholars, and business people at all levels, so they are conscious of moral integrity and honesty and they strive for the appropriate wisdom to live life with forbearance, diligence, self-awareness, intelligence, and attentiveness. In this way we can hope to maintain balance and be ready to cope with rapid physical, social, environmental, and cultural changes from the outside world.²¹

From the above paragraph, the main themes of Sufficiency Economy, which is seen as a Middle Path based on balance and reasonable conduct, include:

- Comprehensive integrated development guidance with 'man' as the centre of development and partnership;
- Sustainable development and proper well-being for Thai people are the main desirable outcomes;

¹⁹ Ibid., p. 60

²⁰ Krongkaew, M. (2004), 'The Philosophy of Sufficiency Economy', [Online, accessed July 28,2004], http://kyotoreview.cseas.kyoto-u.ac.jp/issue/issue3/article_292.doc

- Aiming at a balanced development which takes into account the economy, society, politics, and environment, with the endeavour to make people in the society happy, self-reliant, and abreast with the world, while still preserving the Thai national identity;
- In pursuit of these outcomes, the populace at all levels of individuals, families and communities is taken into account in application of the national development plan.²²

Sufficiency Economy also stresses that strengthening social capital, particularly the moral fibre of the nation, with public officials, theorists and businessmen considering the principles of honesty, integrity and the application of knowledge with prudence are an essential of the Middle Path. Sufficiency economy according to the King's speech is not opposed to the globalization but it is 'the way for recovery that will lead to a more resilient and sustainable economy, better able to meet the challenges arising from globalisation and other changes.'²³ Obviously, the Sufficiency Economy of the King embraces sustainable development as its core concept and outcome.²⁴ Interestingly, the philosophy of the Middle Path has some similarities to the UK government's Third Way. For instance, the Middle Path urges the government and Thai people to reconceptualise their national development and administration philosophy to build upon the nation's strength and culture, in order to better assist the people to achieve proper well-being, long-lasting development outcomes and, in particular, self-reliance, while the essence of Third Way is 'the role of government is to organize and secure provision rather than fund it all.'²⁵ According to this essence, Don Edgar argues (in his discussion of the different levels of development across Australian regions) that the role of government is to focus on the wellbeing of citizens within the nation and to achieve this it requires "a set of articulated values and policies that go beyond simply managing the economy so that it serves shareholders and ensures some degree of equity, justice for all, and inclusion in the business of national

²¹ *ibid.*

²² The Chaipattana Foundation (2000), 'Sufficiency Economy: Direction of the Ninth National Economic and Social Development Plan', [Online, accessed July 28, 2004], http://www.chaipat.or.th/journal/dec00/eng/e_economy.html

²³ *Ibid.*

²⁴ For more details of sustainable development see chapter 2, section 2.5.

²⁵ *Time* magazine, quoted in Edgar, *The Patchwork Nation*, p. 97

governance.”²⁶ In this role government should concentrate on some functions, in other words it should ‘steer (policy decisions) and not row (service delivery)’, but people at the local level can be empowered to do more steering and decentralization is good for development because it draws on the ideas of the local people.²⁷

Conventionally, there are a number of imperfect themes arising from the state sector or the ‘old’ public administration including:

- The state has a centralized control of public administration which is based on a hierarchical command and institutional arrangements based on ‘a rational-legal approach’ which lead to poorly defined objectives;
- The managerial approach of ‘old’ public administration model as ‘one size fits all’ is unable to respond effectively to a variety of people and community needs in the new knowledge economy; and
- ‘Specialisation of public sector activity’ fails to resolve conflicts and power confrontations amongst the various public sector agencies.²⁸

By the same token, the capitalist market sector can create and broaden some development gaps. It is difficult to bridge them or limit their effects later, especially those between people who live in urban and rural sectors. In pursuit of the outcome of the Middle Path and the Third Way, reconfiguring of the conventional relationships between state, market and civil sectors has to be considered. Such reconfiguration highlights the need to form new governance.

1.5 Governance of Thai society

Governance is stated by the UNDP, quoted by Coghill, as "the exercise of political, economic and administrative authority in the management of a nation's affairs at all levels. It comprises the complex mechanisms, processes, relationships and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences, and exercise their legal rights and obligations."²⁹ An important point emphasized by Coghill in the UNDP definition is that exercising power and authority of politics, economics and

²⁶ Edgar, op cit., p. 98

²⁷ Osborne and Gaebler quoted in Reddel, T. (2002), 'Beyond Participation, Hierarchies, Management and Markets: 'New' Governance and Place Policies', *Australian Journal of Public Administration*, vol. 61, no. 1, p. 55

²⁸ Reddel, op cit., p. 55 and Edgar, op cit., p. xiii

²⁹ Coghill, K. (2004), 'Federalism: Fuzzy Global Trends', *Australian Journal of Politics and History*, vol. 50, no. 4, p. 42

administration in the various levels of a nation's affairs should not be the exclusive privilege of the state but shared and participated in by all citizens and diverse groups of organizations rather than only the state itself. Governance is recognized as involving important mechanisms to bring a very wide range of people from individuals to the largest organizations into the processes of decision making and implementation. An important characteristic of governance is “the capacity of the society to respond quickly and effectively to the direct effects of events affected by uncertainty and to provide the reassurance necessary to limit adverse impact on community confidence.”³⁰ This thesis attempts to use ICTs as a means to enhance governance in Thailand, ICTs however are not an end in themselves. Technology can be used effectively or ineffectively.

According to Coghill, the governance of society may be categorized into three main sectors: public governance, corporate governance and civil society. These are all dynamic, active, changeable and interrelated. They intersect and overlap as shown in Figure 1.1.

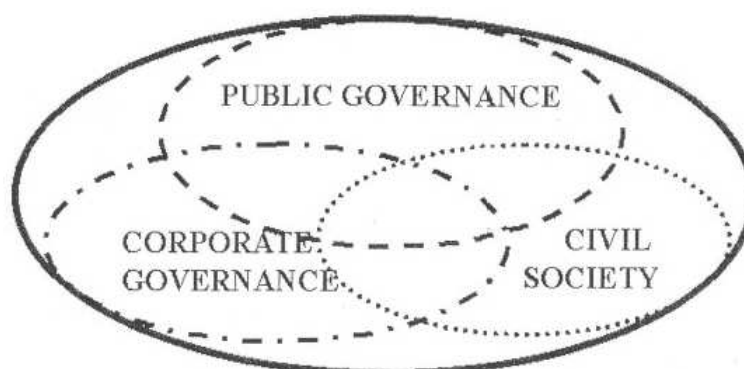


Figure 1.1: The three sectors of the governance of society
(Source: Coghill, 2004, p.43)

According to Coghill, public governance is concerned with the exercise of authorities in creating and sharing the enabling environment and its maintenance at local and national levels with all citizens and diverse groups of organizations, particularly voluntary groups within the state.³¹ Corporate governance is concerned with activities in private, business, or market sectors. Civil society and its governance involve the various groups ranging from a family, local or community institutions

³⁰ Coghill, op cit., p. 47

³¹ Ibid., p. 43

(educational, religious, for example), NGOs, and other non-profit organizations. Coghill emphasizes that the three sectors of the governance of society are interconnected and interdependent, interacting at various, including subsidiary, levels within them each part is related to others. From the claim, it can be said that all stakeholders across those sectors need to be supported to participate in the processes of decision making and implementation and anyone who is at the receiving end of a decision needs to be part of or represented in the process.

Reddel also states that the state should play a major role as facilitator, enabler and animator to promote and strengthen the capacity of the state, local and community institutions to address local and economic issues; to enhance local coordination between (or within) sectors at all levels of public, private or corporate and civil society; and to improve their partnerships.³² This means all levels of government have to work closely together with community and business organizations to avoid unnecessary duplication of resources, promote innovation and develop a shared vision of development at all levels across sectors.

Rhodes, quoted by Reddel, identifies important characteristics of the new governance comprising: “reconfiguring the boundaries of the state that promote interdependence between public, private and civil sectors; ongoing interactions between network members based on trust, the resource exchange, and negotiated processes and shared outcomes; autonomy from but connection to the state reflected in the self organizing nature of networks and the capacity of the state to steer and manage.”³³ However, a number of different agencies and government levels get involved, and their separate operations may work across and respond to one another. It is quite difficult for all diverse agencies and government departments to be able to serve effectively and overcome some restrictions on their separately providing public services to people and community groups. Moreover, in some ‘interorganizational’ networks there is, as Rhodes calls it, ‘the problem of many hands’ which mainly focuses on results but where it is difficult to find out who is responsible for an outcome³⁴. Some developed countries, for instance the UK, Canada and Australia, have set up what is called ‘joined-up government’ in order to establish “the

³² Reddel, op cit., pp. 56-58

³³ Reddel, op cit.

³⁴ Rhodes, R. A. W. (1997), *Understanding governance: policy networks, governance, reflexivity and accountability*, Open University Press, Maidenhead, p. 55

coordination or integration of services from more than one department and potentially from other levels of government and community groups to achieve a better result than their acting separately.”³⁵ Peter Wilkins classified joined-up government or the integration of services into two levels: Local-Level Integration, ‘joined-up at the base’, and the Whole-of-Government Approach, ‘joined-up at the top’.³⁶

The goal of ‘joined-up at the base’ is an approach to deal with the problem of organizational separation at the local level by setting up an experimental ‘one-stop shop’ which brings together state, local government and non-government workers into the one organization. The UK Cabinet office report, quoted by Wilkins, explains that the one-shop government is intended to “provide as nearly as possible a complete service (including if possible the power to make decisions) in one place, at one visit, and with members of the public not having to deal with more than one or two different officers.”³⁷ The UK Local Government Act 2000 is a government framework planned to enhance the economic, social or environmental well-being of community areas by creating a task for local authorities to develop community strategies and identifying a requirement to work together with other agencies and groups. Similarly, an integrated local service point called ‘Centrelink’³⁸ was developed by the Australian government to offer a possible complete provision of the Federal government’s services from a variety of departments through a single organization. This is one of a wide range of approaches of joined-up government to addressing community needs on a more coordinated basis. However, they also provide special branches for specific population groups such as the one at Tangentyere Council for Aboriginal people in Alice Springs so that they do not have to go to the general office which is not suited to their needs (McIntyre 2003, pers. comm.).

Wilkins states that the Whole-of-Government Approach aims to respond to the problem of organizational separation by establishing ‘over-arching structures and practices’ at the top, which include ‘whole-of-government’ planning and reporting arrangements. The planning and reporting were claimed by Wilkins as the “potential to clarify, coordinate and communicate a longer-term view of what a community and/or a

³⁵ Wilkins, P. (2002), ‘Accountability and Joined-up Government’, *Australian Journal of Public Administration*, vol. 61, no. 1, p. 114

³⁶ *Ibid.*, p. 115

³⁷ *Ibid.*, p. 115

³⁸ Centrelink was down graded from a statutory authority last year (2004) - as a result of the Uhrig Report (2003) which didn’t find the Purchaser Provider split was worth the separation of organizational governance

government is seeking in areas such as the social, economic and environmental status of the community” and, by others, as “a significant opportunity to engage the community in social and political processes.”³⁹

In summary, in following the latest Thai National Development Plan, state, corporate and civil sectors are expected to build a network of partnership and interchange, as shown in Figure 1.2. This should be based in the concepts of the Middle Path and the Third Way to create and enhance social capital and wide participation in working on a basis of shared visions and common interests in economic, social and environmental concerns, and should be facilitated, enabled and funded by the state sector. It would include the establishment of ‘joined-up government’ to deliver a better result in ‘better coordinated and at times integrated services’ and better meet the needs of corporate and civil sectors. This is a way intended to engage societal or community members in the creating and strengthening of the fabric of society and enhance trust and confidence between people within an organization or community, or as individuals. According to this theory, a network of partnerships supports better governance of society through interconnectedness, interdependence, coordination and interaction across the three, public, corporate and civil society, sectors of governance thus should deliver better services to relevant organizations, communities and people as a whole.

³⁹ Wilkins, op cit., p. 116

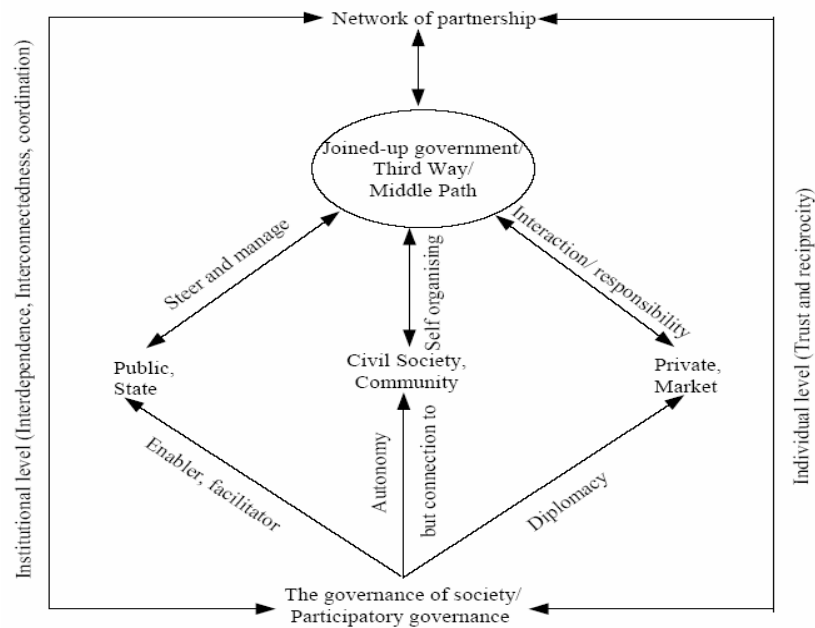


Figure 1.2: Interrelations between network of partnership, joined-up government and the governance of society

(Source: Paisal Nanudorn, June 02, 2003)

1.6 Statement of the Problem

Rural and remote areas can be characterized by four features:

i) Isolation

Most rural people are poor. One obvious reason is that they live far away from a center of economic growth like an urban area. Being out of contact leads them to have fewer opportunities to join in the usual flows. Some flows of wealth or investment go to rural or remote areas, e.g. for extractive industries, tourist sites or new border-crossings. Living in remote areas also means the poor stay out of sight of political leaders, of valuable economic and social information, and cannot reach the national services. Most of the young workers therefore migrate to centers of economic growth leaving the remaining remote people locked into the cycle of poverty and powerlessness.

ii) Shortages of resources to support entrepreneurship, social and economic activities.

The main supporting infrastructures for industry remain concentrated in big cities and urban areas. As a result entrepreneurial capacities and skills are extremely underdeveloped in rural areas, rural financing for economic activities is restricted and there are very low numbers of training and support programmes related to entrepreneurial activity. The infrastructure for rural enterprise development is insufficient. Human resource development and local government enterprise programs are ineffective and in the early stages of enterprise development. Centralization in administrative and economic systems had been concentrated in Bangkok for many decades, which had pooled all government services such as regulatory bodies, customs clearance, and particularly the government bodies for investment like the Board of Investment (BOI). Moreover, both intellectual and social capital has been overlooked as an engine of national wealth creation for several decades.

iii) Inferior Education quality – lack of education supports and funds

Education is one of the most important endeavours to enhance the quality of life of people and to help them to prepare themselves, especially children, to live and work well in a fast changing world. The best way to create a national prosperity, security, democracy and then protect and advance them, is to provide an excellent education to the people in all areas particularly those who have been ‘left-behinds’ or those who live in remote areas. A lack of qualified or high skilled teachers is very common in rural areas. Existing human resources in educational institutions in rural areas lack training and professional enhancement supports. Local institutions, such as Tambon Administrative Organizations (TAO, or *oboto* in Thai), rural communities, religious groups, academic institutions, private sector and other local civil society organizations (CSOs) and non-governmental organizations (NGOs) are quite limited in working together. They need to provide excellent education to all classes⁴⁰ of rural people, rich and poor. Rural areas lack basic infrastructure (landlines, technology facilities, and so on) and supports (funding and training) in promoting education systems and public learning systems to nurture the quality of people lives. For example, a primary school (shown in Picture 1.1) in a rural area in the Northeastern region, located less than 20 kilometres from its provincial capital, lacks basic capacity or resources, both tangible and intangible, to support and enhance a better quality of education either for its younger students or local people there who are unable to help themselves gain more educational skills because they are poor. As well as shortages of obvious tangible resources, for example, books or journals, etc. for students and staff, there is a lack of a wider infrastructure in the educational area with an absence of communication channels to share information and knowledge with other schools, educational institutions and departments at regional and national levels, and which could connect the school into an outside world in order to work together with and gain better academic supports, especially from the private or corporate sector which includes NGOs and

⁴⁰ Class in terms of this thesis looks at the ‘haves’ and ‘have-nots’ in terms of socio-economic indicators described earlier in Section 1.2

non-profit organizations. This worsens the relative inadequacies in intangible assets of a rural school, particularly in its human resources.



Picture 1.1: A typical rural school building in Northeastern region, Thailand
(Source: Paisal Nanudorn, July 23, 2003)

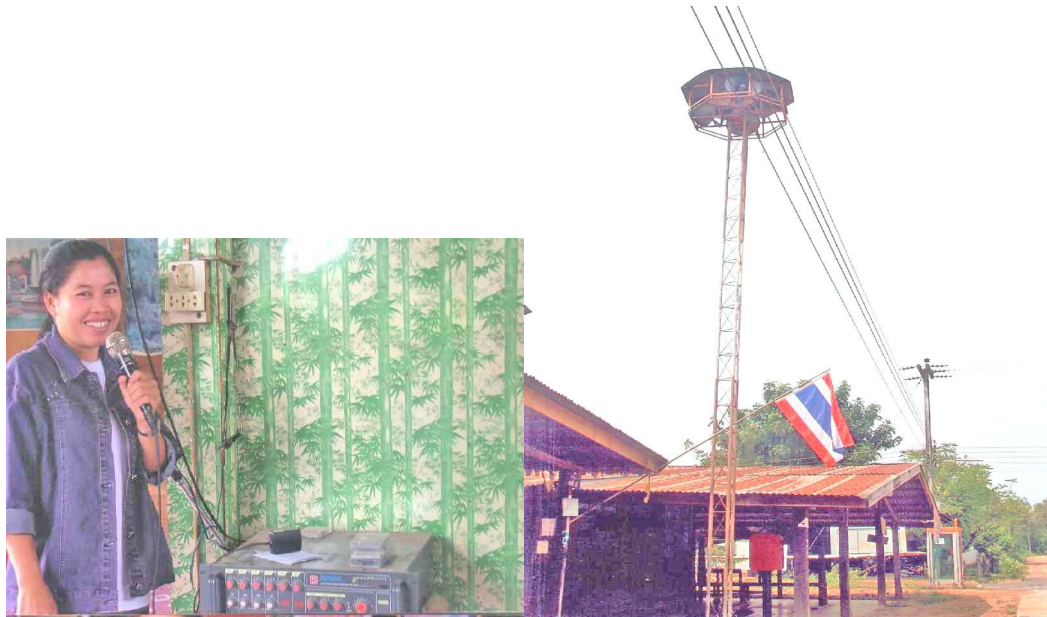
(iv) Lack of capability and training

The consequence of isolation, lack of resources, and inferior educational quality of rural communities leads to a shortage of capabilities by individuals and social entities to use resources in an efficient, effective, relevant and sustainable way. This negative result mainly hampers the rural people and local institutions from playing active roles in development processes and from working together with CSOs and NGOs to meet their desired goals. In addition, the increasing gap between their relative lack of networks of information and knowledge and the increasing interconnectedness elsewhere in Thai society of relevant sectors (such as public, private and business) and institutions at various levels (community, regional, national, and international), will discourage the latter from participating with the rural people and their social entities to generate capabilities from within by, for example, learning by doing. Although, as Picture 1.2 shows, the school has some basic facilities such as computer hardware, it lacks the information and communication infrastructure (such as internet access) necessary to build up physical and social networks of cooperation and interchange to form interconnectedness between schools, training colleges and industry which could help people and local institutions to maintain and promote their social and human capital (see the definitions of social and human capital in Section 2.2.1 Concepts of Capacity building).



Picture 1.2: A computer room in rural school
(Source: Paisal Nanudorn, July 23, 2003)

According to this limited case study, the majority of participants in the villages in the study area stressed that the new technology (such as a telephone booth) is available for basic communications even though its quality and service are not too good. In every village the Thai government also has developed ‘the sound on wire’ as a news broadcasting centre, which combines a sound audio system and big loudspeakers to disseminate daily news or useful information to the people in the village (see Picture 1.3). However, the old ICT the telephone line, which is an important and low cost communication link, is unavailable in most rural communities. Therefore, walkie-talkies are common communication tools mostly used by community leaders, heads of villages and chiefs of sub districts or tambon, to communicate and exchange news and information between themselves in their villages and sub districts, and the district and provincial officers.

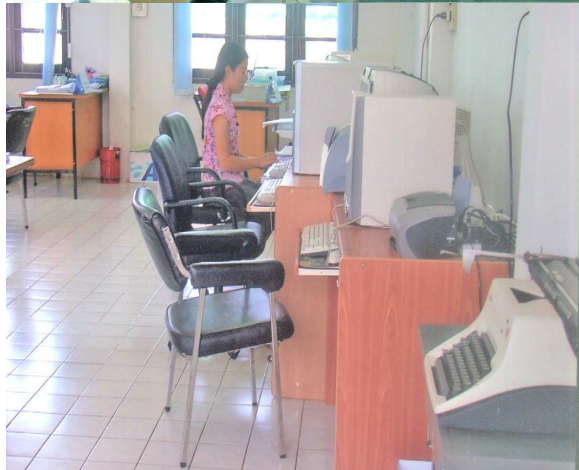


**Picture 1.3: A village ‘sound on wire’, Nong Hua Ku, Udorn Thani
(Source: research assistant – Lumyai Nanudorn, March 04, 2004)**

In terms of access to the new technologies, the most ubiquitous new technology currently available and affordable for most rural people is wireless technology and the mobile phone. According to Government sources the mobile phone is playing a major role as a daily communication tool connecting people to people at and between all levels; local-personal, community, organizational to international. In contrast, computer technology, which provides for important information-handling tools to produce, store, process, distribute and exchange information, is hardly found and available for rural people. Most computers are only used in schools and local government offices (see Pictures 1.4 and 1.5 respectively). However, even in these organizations it is used for only basic jobs because of the lack of capacity to apply the technology to meet their current needs and benefits. In addition, as mentioned earlier, every part of Thailand’s rural society lacks enough landlines to form a massive infrastructure of interconnected telephone services, computing hardware, and the Internet which potentially could reach into every corner of the country.



**Picture 1.4: The computer room at Nong Seang Soi School, Udorn Thani
(Source: Paisal Nanudorn, August 06, 2003)**



**Picture 1.5: Uses of new technologies in Tambon Kom Bong, Udorn Thani
(Source: research assistant – Lumyai Nanudorn, March 27, 2004)**

1.7 Rationale for the research and for the choice of the case study

1.7.1 Rationale for the research

The reason for my undertaking this research is to:

- Explore how ICTs can play a role as a capacity building tool to bridge the imbalanced development gap in rural areas in Thailand;
- Design a framework for adapting ICTs to rural Thailand which may help to achieve greater rural participation through integrated development and support of entrepreneurship and address the interconnectedness of institutions and organizations at local, regional, and national levels to balance the development in rural areas.

Up to now few research projects regarding ICTs for development have been carried out in Thailand and very few in aspects of rural development. Most of the research or surveys, for example *Accelerating E-readiness in Thailand: A case study* (2001) reported by World Bank teams and *Bits and Bahts: Thailand Internet Case Study* (2002) by International Telecommunication Union (ITU)⁴¹, have tended to focus on the problems which impede the development of ICTs and on policy and regulation to facilitate this development. The World Bank *E-readiness* study focused on establishing and improving ICT infrastructures to strengthen economic development and environmental protection, while *Bits and Bahts* detailed the main impediments to telecommunication development including policy and regulation which was stalling the ICT growth leading to the country falling behind its regional neighbors. Interestingly, the latter report concluded that “one barrier Thailand faces is a clear and cohesive regulatory and policy direction for Internet development. The existing infocommunication regulatory situation is confused”⁴². For instance, in the ICT area there are at least two ministries and another three government departments taking responsibilities: the Ministry of Science, Technology and the Environment; the Ministry of Transport and Communications; the department of Post and Telegraph; The National Science and Technology Development Agency (NSTDA); the National Electronics and Computer Technology Centre (NECTEC). Recently, in response to the

⁴¹ ITU, op cit., p. 25

⁴² Ibid., p. 43

Bits and Bahts recommendation the government has established a super ministry - the Ministry of Information and Communication Technologies - to take the lead on all ICT matters and which will be in charge as the administrative body responsible for all ICT-related projects.

However, those studies were very important for me to make efforts to recognize the importance of ICT infrastructures during the initial stages of the development of my research. Rather than focusing on only ICT infrastructure development at all levels - national, provincial and community - this study was intended to disclose and understand the interconnectedness and partnerships among public, private and community sectors to enhance the capacity of people in rural areas and their local institutions (villages, schools, and religious institutions) through an integrated development approach which consists of capacity building, entrepreneurship, knowledge management, and sustainable development. This approach could use the potential advantages of ICT as an add-on tool to effectively enhance and promote balanced development in rural areas in Thailand.

A special focus will be on capacity development at individual and organizational levels. Before 1997 Thai political, administrative, and fiscal systems had traditionally been highly centralized with government services and such as regulatory bodies and higher education concentrated in Bangkok and other big cities. In 1997 the central government spent 93 percent of the total general expenditures and collected 95 percent of general tax revenues, only 25 percent of municipal revenues were locally collected and retained.⁴³ As a result, local governments lack adequate resources and are constrained by weak institutional capacity, particularly with regard to financial management, planning and service delivery, and public infrastructure. In response, the Government has launched a series of new initiatives to promote increased local participation and development. Since 1997, more than 7,000 Tambon Administrative Organizations (TAOs) and Tambon Councils were established as new local administrative bodies at the sub district level.⁴⁴ The TAOs are responsible for organizing the decentralization process to encourage community organization leaders to participate in decision making on community public services to respond to their

⁴³ World Bank (2000), 'Beyond the Crisis: A Strategy for Renewing Rural Development in Thailand', p.9, [Online, accessed 28 June 2002], <http://lnweb18.worldbank.org/EAP/eaprural.nsf/40ByDocName/StudiesByTypeofDocumentSectorReport>

⁴⁴ Ibid.

community's problems. However, TAOs remain extremely weak, lack transparency in decision making, and require significant capacity building before becoming meaningful agents of rural development and community participation. They require sustainable measures from national policy makers to improve and bring efficiency and capacity into these units of local government, in order to better deliver social and economic services, and increase the quality of lives of rural people.

As the world became 'smaller' because of the innovations of successive communication and transportation technologies, the future of Thai rural communities has been increasingly complex and interdependent. Development in a globalizing world requires that people and their institutions should work together and reconnect through social movements, if they would like to achieve sustainable social, economic, and environmental goals. If they are excluded from wider communication networks, they are likely to be disadvantaged.⁴⁵ They should link up 'the never linked' or 'temporarily unlinked' threads of government, business, and community activity. The new technologies now have "reached the point where everything can be linked, almost instantaneously."⁴⁶ They can reach the unreached. To meet their goals, the interconnectedness of a variety of partnerships at different levels must be re-established and reconstructed.

The illustration of 'nested systems' in Figure 1.3 suggests the possible interconnectedness of relevant sectors and local institutions which can work together across many levels. Within nested systems there is a network of collaboration or partnerships which can help support participatory as well as learning processes in social, economic, political and environmental protection activities. These can involve many different individuals and organizational entities, including:

- **Locally:** ordinary citizens, community leaders, business leaders, local institutions, local government;
- **Regionally:** civil societies (CSOs), non-government organizations (NGOs), government agencies, business sectors;

⁴⁵ Castells, M. (2000), *The Rise of the Network Society*. Oxford: Blackwell Publishers. It can be argued that globalization is very negative and so ignoring the market is the way to go. Nevertheless, political and social mobilization requires that people know what is happening. So that internationalization could be a better way to deal with globalization which can effect positively and negatively to people's live in today in social, economic, political and environment arenas.

⁴⁶ Edgar, op cit., p. 3

- Nationally: state departments and corporate organizations involved in the processes of making national policies such as the National Economic and Social Development Board (NESDB), the Board of Investment of Thailand (BOI), Bank of Thailand (BOT), Ministerial offices, Thai Development and Research Institution (TDRI), business corporations and national business coordinating organizations;
- **Internationally:** other nations or groups of nations who share benefits and common interests in economic, social and environmental areas including the Asia-Pacific Economic Cooperation (APEC), Asean Free Trade Area (AFTA), World Trade Organization (WTO), Asian Development Bank (ADB), the United Nations Development Programme (UNDP).
- NGOs nationally and internationally.

This will develop a model to show the ‘governance’ interactions across state, business and civil society components. The concentric circles are of two different types of entity or construct. Four are of levels of government while the other construct is of four artificially separated categories of dynamic elements of a social group of any size – the inner rings are made up from the outer one rather than it being somehow ‘outside’ them. The research will try to apply the model to make sense of my research material.

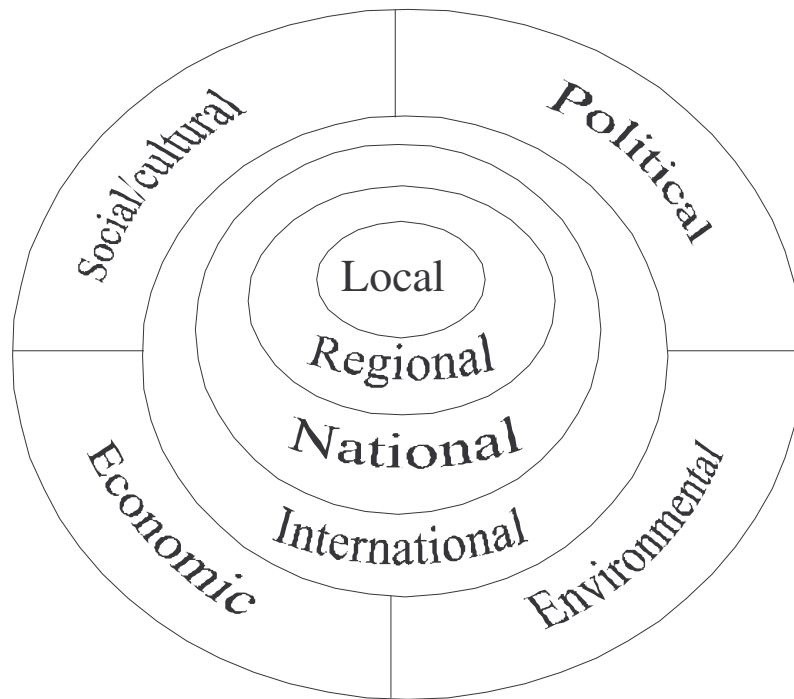


Figure 1.3: Nested Systems
 (adapted from McIntyre-Mills 2003)

1.7.2 Rationale for the choice of the case study

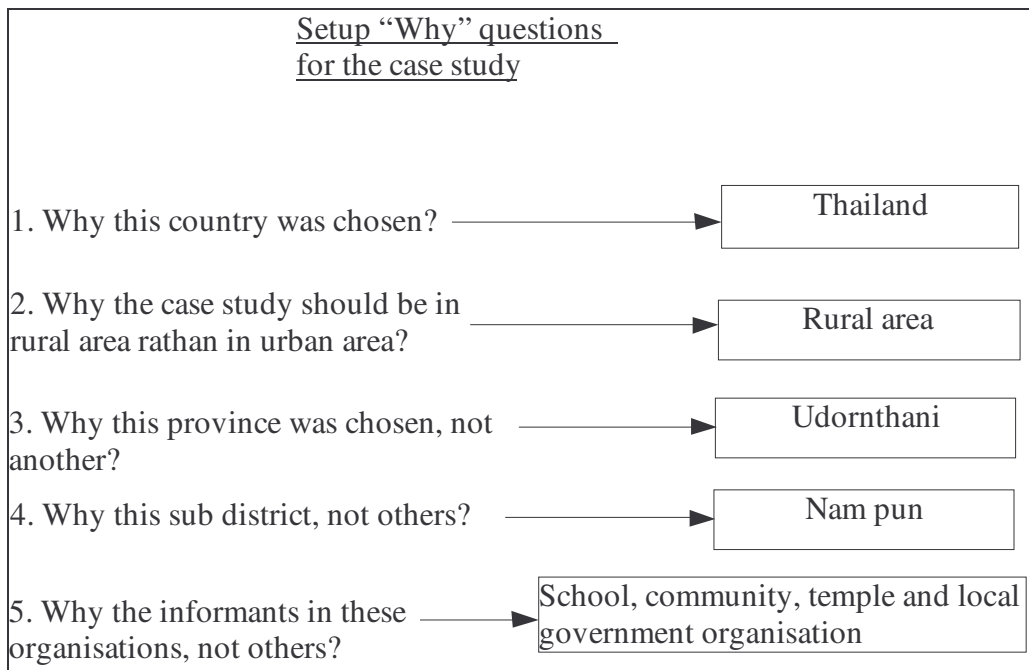


Figure 1.4: "Why" questions for the case study area

Figure 1.4 shows the questions I asked in selecting this case study in the Northeast of Thailand. It was chosen because I thought it would be an area of sources of investigation and exploration of knowledge and information in its context. In answering the above five questions my reasons are as follows:

1. *Why Thailand was chosen?* The rationale for choosing Thailand is because the researcher lives in this country and has some experiences on the imbalance of development in the country which is then very interesting to be studied what are really hidden under this phenomenon, why it happens and how and what possible and appropriate solutions as develop approaches need to be implemented to address development matters and to build a large community.

2. *Why the case study for this research should be in rural rather than in urban area?* On purpose, a rural area was selected for the reasons that the inequality (expressed as the poverty divide and the digital divide) exists between the remote and rural areas rather than in urban areas. My aim to choose the rural is in order to address the divides and development gaps between urban and rural areas.

3. *Why this province in the Northeast region was chosen, not another?* I had a plan to choose this province, Udorn thani, in this region based on two main reasons: a.) this province is my home town which I lived and worked for many years and b.) the Northeast scores lowest in most socio-demographic and socio-economic indicators in comparison to other regions – the Central, East, North, South, West as well as Bangkok.

4. *Why these villages in Num pun were selected as the case study?* The Basic Minimum Needs indicators (BMN) developed by the department of community development of Thailand were used as a basic reason for selecting which sub district in Udorn thani province will be chosen as the case study area. Based on the indicators, Num pun's villages were selected as the study area (these indicators will be discussed in more detail in Chapter 3 Research methodology and Design).

5. *Why these informants from the local organizations were chosen?* The informants from local government organization, schools, temple, and villages are indicative of the poor in the area who have opportunities for using the new technologies such as computing hardware and mobile phones in their offices or at homes. A non-probability, purposive sampling technique was employed to ask 11 key informants at first time of sampling and then they were asked again to recommend

other people who met the criteria of the research and who might be willing to participate in this study.

1.8 Objectives of ICT development in this study

- To enhance participatory processes among partnerships at different levels
- To link people and relevant institutions in advantaged developed urban areas and disadvantaged rural areas to work together, in order to better equip and enable the socially excluded (the have-nots and the left-behinds) to achieve their goals and to ensure that their local knowledge can be considered and communicated to others. They in turn can learn from wider communication networks beyond the village.

CHAPTER 2

THEORY, LITERATURE REVIEW AND CONTEXT

2.1. Scanning and integrating the knowledge domain

Thinking about the human dimension of information and communication technologies (ICTs) for development in rural and remote areas should address many knowledge domains and it should integrate several pertinent bodies of literature. This study draws on five main bodies (or domains) of literature: Capacity building; Entrepreneurship; Knowledge Management; Information and Communication Technologies; and Sustainable Development. Each will be discussed in a section below.

2.2. Capacity and its relevance to development

Capacity is defined as “the organizational and technical abilities, relationships and values that enable countries, organizations, groups and individuals at any level of society to carry out functions and achieve their development objectives over time.”⁴⁷ It refers to the outcome of institutional, organizational, and individual activities. Indicators of capacity, pointed to by Morgan, focus on the performance of some sort of organizational function or activity such as decision making, leadership, service delivery, financial management, ability to learn and adapt, pride and motivation, organizational integrity and many others.

2.2.1. Concepts of Capacity building

Capacity building has many different meanings depending on the context within which the concept is being utilized.

⁴⁷ Morgan, P. (1998), *Capacity and Capacity Development-Some Strategies*, CIDA Policy Branch, Note prepared for the Political and Social Policies Division, Policy Branch, CIDA.

According to Roche's definition, capacity building involves three elements: a) resources to change the delivery system and build its capacity to maintain programs and to deliver new ones; b) a shift in focus from individuals (exclusively) to organizations and systems; and c) thinking in terms of an investment.⁴⁸ Roche also compares the different underlying concepts of a traditional deficits model, often applied both in community development work and in education and training, and a capacity building approach. She concludes that a traditional deficit model focuses on areas of weakness or problems and tries to correct these, by often depending on a top-down planning and professional-driven process. She stresses that a capacity building approach concentrates on enhancement.

Capacity building, as defined by Morgan, refers to "the approaches, strategies and methodologies which are used by national participants and/or outside intervenors to help organizations and/or systems to improve their performance."⁴⁹ This is about identifying 'what' factors, the underlying causes of lack of capabilities, and 'how' issues in order to enhance the capacity of institution and individual.

Society's capacity to meet the needs of its members depends on their available resources and how successfully those resources can be utilized.⁵⁰ In order to understand the 'what' factors possibly underlying the causes of lack of society's capability, potentially appropriate resources can be grouped into two dimensions of capacity building; tangible and intangible.

2.2.1.1. Tangible dimension

2.2.1.1.1. Financial and Physical resources

Tangible resources obviously include financial resources and physical assets such as infrastructure (roads, water supply, electricity, telephone lines, and so on), plant and machinery and natural resources.

2.2.1.1.2. Organizational and institutional systems that support participation

These tangible resources (also described as organizational structures, institutional systems, legal frameworks and policies) include such tangible forms of

⁴⁸ Roche, A. M. (2001). What is this thing called workforce development? In A. M. Roche & J. McDonald (Eds.), *Systems, Settling, People: Workforce Development Challenges for the Alcohol and Other Drugs Field* (pp. 5-20). Adelaide: The National Centre for Education and Training on Addiction.

⁴⁹ Morgan, op cit.

⁵⁰ Lavergne, R. and J. Saxby (2001), *Capacity Development: Vision and Implications*, CIDA Policy Branch 3

information and analysis as books, reports and the like including digital versions of what were only printed/written before.

2.2.1.2. Intangible dimension

Some experts see intangible dimensions of capacity as ‘core capabilities’ which are crucial to capacity building because they decide how successfully tangible resources are utilized in an efficient, effective, relevant and sustainable way.⁵¹ Intangible resources, as claimed by March, Smyth and Mukhopadhyay, include “political or social resources: rights and claims on people; friendships; membership of networks; skills; experience of working in the public sphere; self-confidence and credibility; status and respect; leadership qualities; and time.”⁵² Regarding the relationships between tangible and intangible resources, they said that “If people have very few tangible resources such as land or income, intangible resources are especially important in shaping their lives.”⁵³

2.2.1.2.1. Intellectual capital: Human, structural, and customer

The most widely used definition of intellectual capital is "knowledge that is of value to an organization."⁵⁴ The main elements of intellectual capital are human capital (skill, competency, education, training, creativity, resourcefulness and capacity to learn and adapt of individuals and social entities), structural capital (institutional and organizational structures, processes, and information systems), and customer capital (loyalty, goodwill, patents, and so forth that remain when its members or employees leave).

Unlike structural capital, human capital is always owned by the individuals who have it. What ‘owns’ means here can be quite complex. Human capital is within/part of the individuals who have it but there can be competing views about who can control and take the ‘profits’ the use of it, e.g., a state or an employer, which raise complexities of what ‘owning’ means in practice and it is the important source of innovation, creativity, and ability to change. Moreover, human capital is a renewable resource of intellectual capital.⁵⁵

⁵¹ Ibid.

⁵² March, C., et al. (1999), *A Guide to Gender-Analysis Frameworks*, Oxfam, Oxford, p. 24

⁵³ Ibid.

⁵⁴ Bassi, L. J. (1997), “Harnessing the power of Intellectual Capital”, *Training & Development* 51(12): 25-30.

⁵⁵ Ibid.

2.2.1.2.2. Cultural and social capital

Cultural capital “refers to the extent to which individuals have absorbed the dominant culture.”⁵⁶ According to Pierre Bourdieu, cultural capital is defined in three forms: in the embodied state, in the objectified state and in the institutionalized state.⁵⁷ He said that the embodied capital can be found in “the form of long-lasting dispositions of the mind and body” such as culture and cultivation which cannot be “transmitted instantaneously (unlike money, property rights, or even titles of nobility) by gift or bequest, purchase or exchange.”⁵⁸ Cultural capital, in the objectified state, is in the form of cultural goods (pictures, books, dictionaries, instruments, machines, etc.). Meanwhile, the institutionalized capital is “in a form of objectification which must be set apart because, as will be seen in the case of educational qualifications, it confers entirely original properties on the cultural capital which it is presumed to guarantee.”⁵⁹ Pierre Bourdieu claimed that, cited by Bilton et al., “the greater degree of cultural capital individuals possessed (the more absorbed they were in the dominant culture), the more successful they would be in the educational system.”⁶⁰

But social capital is “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition - or in other words, to membership in a group.”⁶¹ Pierre Bourdieu explains that social capital is the networks that provide access to other resources but it can also exclude if people are not accepted into a network. The well-known concept of social capital, described by Robert D. Putnam, which refers to “features of social organization, such as networks, norms, and trust, which facilitate coordination and cooperation for mutual benefit.”⁶² The second two definitions put the network itself as the defining characteristic whereas the first one includes only what can be gained from the network. Social capital can enhance the benefits of investment in physical and human capital and can itself be increased as

⁵⁶ Bilton, op cit., p. 656

⁵⁷ Bourdieu, P. (1997), *The Forms of Capital*, in Halsey, A.H., Lauder, H., Brown, P. & Wells, A. S. (eds.), *Education: Culture, Economy, and Society*, New York, Oxford University Press, pp.46-58

⁵⁸ Ibid., p.48

⁵⁹ Ibid., p. 47

⁶⁰ Bilton, op cit., p. 656

⁶¹ Ibid., p. 51

⁶² Putnam, R. D. (1993), *The Prosperous Community: Social Capital and Public Life*, 2004, [Online Accessed: 16 April 2004], <http://www.prospect.org/web/printfriendly-view.www?id=5175>

another benefit through the symbiotic relationships between the different forms of capital.

Rydin and Pennington state that *social capital* includes such things as: the extent of networks between individuals and groups; the density of relationships within networks; knowledge of relationships within networks; the existence of obligations and expectations regarding these relationships, i.e. promoting reciprocity; other forms of local knowledge; the level of trust between individuals and groups; norms of routine behaviour; and the existence and use of effective sanctions that punish free-riding.⁶³

Social capital, according to Don Edgar, “grows out of those social interactions and networks we experience in our daily lives.” It is a quality of a group, community, and institution as a whole, rather than of individuals.⁶⁴ And Coleman, quoted by Don Edgar, understands it as the relationships and ties, the networks, norms and sanctions, which support the accomplishments of human capital.

Although many advanced development approaches are applied to establish equal opportunities in education and training, they cannot change all effects on people’s lives of the human and culture capital built up during childhood.⁶⁵ However, the management of knowledge and learning systems could be applied to enhance building cultural capital through utilizing the advantages of ICTs as a basic tool to promote the flows of knowledge, learning processes aimed to strengthening cultural capital. This is a possible way to link power, knowledge and culture together, in order to enhancing the interrelationships between network of partnership, joined-up government and the governance of society, at least at a community level first. Instead of only trying to link power and knowledge, culture can be another important matter. As Foucault’s claim, cited by McIntyre-Mills⁶⁶, ‘that not only 'power and knowledge' are linked but, instead, power, knowledge and culture are linked.’

⁶³ Rydin, Y & Pennington, M. (2000), *Public Participation and Local Environmental Planning: the collective action problem and the potential of social capital*, Local environment, v.5, i.2, pp.153-169

⁶⁴ Edgar, op cit., p. 101

⁶⁵ Ibid., p. 32

⁶⁶ McIntyre-Mills, J. J. (2000), *Global Citizenship and Social Movements - Creating Transcultural Webs of Meaning for the New Millennium*. Amsterdam: Harwood academic publishers, p. 21.

2.2.2. Capacity building and the new technology: information and communication technology

Capacity building can be focused not on a particular group or organization but rather on the capacities needed by a range of different people working in the same environment and addressing their common concerns. It can equip them with access to basic information about their rights; provide training to broaden their awareness of the problems facing people, groups or organizations in their areas; and develop better communication skills for participating in political and socio-economic arena according to objectives defined by them.⁶⁷ It is '*making the links*', to use a term coined by Deborah Eade, an effort to link all stakeholders to form a network of partnerships which aims to promote the capacity building process.⁶⁸ Depending on the situation, these stakeholders may be in public or private sectors or both and at different levels in either of these.

Every organization has communication and information needs involved in networking. Computers are often essential for those organizations to manipulate large quantities of data through the storage, retrieval, and analytic facilities they can provide. When linked into communication networks they are also very useful to disseminate and exchange data and information among stakeholders in human networks of partnerships.

"Information is vital for participants and empowerment, and hence to capacity building."⁶⁹ Eade understands accessibility of reliable information as a power tool to strengthen people's capacity to determine their own interests. Lack of access to the information can "leave them prey to rumours or to the deliberate manipulation of information for political or military purpose."⁷⁰ The 'power tool' of access provides for ordinary people and organizations to build their capacity to organize to protect their interests, to mobilize their resources (human rights, public voice, and so on), and effectively respond to crises.

The progress of ICTs, which can be used to make the links or connections and provide information accessibility, has significantly grown and been used as an emerging and essential tool to promote development in many areas by individuals,

⁶⁷ Eade, D (1997), *Capacity-Building: An Approach to People-Centred Development*, Oxford, Oxfam. P.28

⁶⁸ Ibid.

⁶⁹ Ibid., p. 67

⁷⁰ Ibid., p. 184

organizations, and nations. However, as Mark Malloch Brown comments in *Human Development Report: Making new technologies work for human development* (2001), “there is no blueprint. ... Technological progress is not a simple hand-me-down in an appropriate form and cost to developing country users. Rather, it must also be a process of knowledge creation and capacity building in developing countries.”⁷¹ Turning technology into a tool for capacity building and knowledge creation often needs purposive effort and public investment in innovative creation and wide diffusion.⁷² In return, promotion of capacity building, especially human capability, requires better education, training, and information and knowledge accessibilities, such as by the Internet. “Access to information is as central as education to build human capabilities.”⁷³ Education establishes cognitive skills to utilize the information which provides content to knowledge which can be used for further education. Therefore, the new technologies and capacity building can be reinforcing and they can create a virtuous circle.

The new technologies, which will be discussed in more detail in the next section, are playing a major role nowadays, not as an end in themselves but to promote and enhance capacity building in several ways.

- First, they can directly enhance people’s knowledge (intellectual capital) and living standards. Information and communication technologies can support rapid, low cost access to information and knowledge covering all areas of people activities. For example, information of market prices in India, distance learning in Turkey and long-distance medical diagnosis in the Gambia are some best practices of internet access aimed to enhance people’s knowledge and the quality of their lives.⁷⁴
- Second, they can develop and increase people’s ability to participate more actively in the social, economic, and political activities of a society.⁷⁵ The use of ICTs can provide for the creation of new communities based on interaction and partnership at and/or between these ‘levels’, not just for increased

⁷¹ UNDP (2001a), *Human Development Report: Making new technologies work for human development*, New York, United Nation Development Programme, p. iv

⁷² Ibid., p. 43

⁷³ Ibid., p. 35

⁷⁴ Ibid., p. 2

⁷⁵ Ibid., p. 28

participation in the people's existing communities. Therefore, social interactions, ties, the networks and relationships of the people can be increased and nurtured among groups, organizations, and communities.

Increasingly, access to knowledge which is overloaded over virtual networks and communities is becoming vital for competitive advantage in business and education and to ensure better, sustainable decision-making in the social, economic and environmental sectors. Crucial elements of intellectual capital here are the abilities and skills of people to learn from best practices elsewhere and then adapt and apply them into their local context. This process would include effectively exploitation of available opportunities and resources (tangible and intangible) from both inside and outside their local organizations, institutions, or communities. It would also use informal and formal mechanisms to maintain achievements and to continuously learn, apply, and move forward to achieve further development goals. Such skills to learn, apply, share and document experiences are called *entrepreneurial skills*.

2.3. Entrepreneurship

In their research work, Rae and Carswell quoted the assertion of Shane and Venkataraman that entrepreneurship is “a dynamic form of social and economic behaviour in which people respond to environmental signals about the availability of opportunities and the resources with which they can be exploited.”⁷⁶ From other experts, they have seen entrepreneurship as “the process of identifying opportunities for creating or releasing value, and of forming ventures which bring together resources to exploit those opportunities.”⁷⁷ In my study, creating and enhancing entrepreneurial capabilities are important aspects. According to Rae and Carswell, entrepreneurial capabilities include: confidence and self-belief; self-efficacy; personal values and motivation to achieve goals; personal theory derived from meanings and learning episodes; known capabilities, skills and knowledge; social relationships through which learning takes place; the ability to learn quickly and actively from a range of sources and the ability to reflect on that learning process.⁷⁸ There is a wide variety of proposals for creating and developing entrepreneurial capacities and skills but for the purposes of

⁷⁶ Rae, D. & Carswell, M. (2000), “Using a life-long approach in researching entrepreneurial learning: the development of a conceptual model and its implications in the design of learning experiences”, *Education & Training* 42(4/5): 220-227

⁷⁷ Ibid.

⁷⁸ Ibid.

this study four main characteristics of entrepreneurship will be emphasized, because they suit the sufficiency economy.

2.3.1. Experiential and cognitive learning

Entrepreneurial learning is the key point of entrepreneurial effectiveness, which cannot be easily done in a classroom which limits learning and practice of entrepreneurial capability and skill. Learning theories such as experiential learning and cognitive learning can be used to improve the process. The former describes and proposes “a learning process focusing on how people turn their own experience into learning, what forms of experience may result in particular learning outcomes, and the relationship between experience, learning, and subsequent behaviour.” The latter emphasizes a problem-solving process intended primarily for “the acquisition, storage, and use of entrepreneurial knowledge in a long-term memory.”⁷⁹

2.3.2. Social learning, learning by doing, tacit and explicit entrepreneurial knowledge

Entrepreneurial learning is also a continuing social process of individuals learning from other people who are powerful influence such as their parents, teachers, spiritual leaders, and so on. Thus social relationships or networks are fundamental in their learning area.⁸⁰ Those local actors and outside players at different levels should work in concert to ensure that their interconnectedness can enhance the learning process which can help the local actors transform their experiences into learning.

Learning by doing implies “a capacity to enhance and build on existing knowledge bases and contribute to the lessons learned from the development efforts.”⁸¹

Based partly on analyses of entrepreneurial capabilities, it has been claimed that entrepreneurial knowledge can be grouped into two main categories; tacit and explicit knowledge.⁸² The knowledge, particularly the explicit, which has experiential and cognitive learning outcomes can be taught and applied to entrepreneurial activities.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ ECDPM (2003), “Developing capacities for ICT enabled development”, *capacity.org*, issue 8, p.3, [Online, accessed 30 January 2004], <http://www.capacity.org>.

⁸² Nonaka, I. and H. Takeuchi (1995), *The Knowledge-Creation Company: How Japanese Companies Create the Dynamics of Innovation*, Oxford, Oxford University Press.

Nonaka and Takeuchi’s view of knowledge distinguishes between tacit and explicit knowledge. They assert that “tacit knowledge is highly personal and hard to formalize, making it difficult to communicate or to share with others. Subjective insights, intuitions, and hunches fall into this category of knowledge. Furthermore, tacit knowledge is

2.3.3. Systemic model of entrepreneurial learning: individual, enterprise, and network

Any entrepreneurial programmes should promote learning across a variety of levels such as individual ('entrepreneurial learning'), organizational ('enterprise learning'), and inter-organizational ('network learning'). The learning process flowing and the knowledge sharing through these levels could create and enhance entrepreneurial capabilities and skills throughout a national society.

2.3.4. Partnership approach: Interconnectedness among economic, social, and political webs

Lorraine Warren argues that experiential learning is crucial to entrepreneurial learning even though there are few studies on how successful entrepreneurs have turned their experience into learning.⁸³ The relationships between entrepreneurial learning and enterprise learning, and between enterprise learning and network learning, are complex. It is vital to promote better development opportunities by enhancing more co-operations across different interest groups within the community. My research includes interviews with academic teachers, local governments, and other family support service providers, business leaders, and government officers to ask how to reinforce a culture of interdependence through a networking and partnership approach.⁸⁴ The interconnectedness of small enterprise, as Warren quoted Gibb's concept, is a dynamic network of customers, suppliers, bankers, accountants, solicitors, agents, marketing channels, workers, regulatory authorities, including friends and family. Success in managing and developing a small enterprise depends on making connections within this network. Mindfulness of social, economic and environmental connections supports its ability to survive.⁸⁵

2.4. Knowledge Management

'Information is power', 'knowledge is power', and 'power is knowledge' have been the claims by academic researchers for many years. Joel Samoff and Nelly

deeply rooted in an individual's action and experience, as well as in the ideas, values, or emotions he or she embraces." Whereas, "explicit knowledge can be expressed in words."

⁸³ Warren, L. (2004), "A Systemic Approach to Entrepreneurial Learning: An Exploration Using Storytelling", *Systems Research and Behavioral Science* 21:3-16

⁸⁴ Edgar, op cit, p. 72

⁸⁵ McIntyre-Mills, J. (2003), *Critical Systemic Praxis for Social and Environmental Justice: Participatory Policy Design and Governance for a Global Age*, Kluwer Academic/Plenum Publishers, New York.

Stromquist claim that ‘information is development’ due to information being the critical ingredient of change and progress, in private and public sectors, or in increasing income, knowledge, and health of people.⁸⁶ Moreover, they understand that, in a knowledge economy, information is a more important factor than other conventional development factors, such as land, labour, or capital. Eliminating poverty, ignorance, and disease requires ‘knowledge affluence.’ Meanwhile, John Gaventa and Andrea Cornwall are among those asserting that knowledge is power and vice versa.⁸⁷ Therefore, information, knowledge, and power are inextricably intertwined. Also, logically, information and knowledge are critical components of development because everything we do depends on information and knowledge.

Accessibility of information and knowledge may significantly promote and support users, such as individuals, groups, and organizations, in pursuit of their development goals. However, the accessibility of information and knowledge does not guarantee the users can continuously and successfully exploit them for long term benefits. They need not only to access to knowledge, but may also need to participate effectively in its production, use and dissemination.⁸⁸ To pursue this hypothesis, my study takes account of claims about knowledge management and information sharing in the research literature. Knowledge management and information sharing mechanisms can promote and support meaningful participation and decision-making, especially at local level. In this study ‘communities of practice’ (explained by Wenger, see the next section: Communities of Practice) and the notion of a ‘knowledge spiral’ (coined by Nonaka and Takeuchi, see Figure 2.1 below) are seen as mechanisms of information and knowledge sharing.

Knowledge management is about linking, sharing and creating new ideas.⁸⁹ McIntyre also describes that knowledge management is based on the computing analogy that we start with computing bits, combine these to form data and the data then needs to be combined to form information and the information needs to be interpreted to form knowledge. This is more complex when it is cross cultural.⁹⁰

⁸⁶ Samoff, J. & Stromquist, N.P. (2001), “Managing Knowledge and Storing Wisdom? New Forms of Foreign Aid?”, *Development and Change*, v. 32, p. 1.

⁸⁷ Gaventa, J. & Cornwall, A. (2001), “Power and Knowledge”, in Reason, P. & Bradbury, H. (eds.), *Handbook of Action Research: Participative Inquiry and Practice*, SAGE Publications, London, pp. 70-80.

⁸⁸ *Ibid.*, p. 72

⁸⁹ Janet McIntyre, pers comm. 2005.

⁹⁰ McIntyre-Mills, op cit., p. 409, she cites Simms and other systems thinkers.

Knowledge Management (KM) is also “the process of creating, capturing, and using knowledge to enhance organizational performance.”⁹¹ Knowledge management is most frequently associated with two types of activities: the documentation and appropriation of individuals' knowledge and its dissemination throughout an organization; and the facilitation of people exchanges using such communication tools as email and the Internet.

2.4.1. Communities of Practice (COP)

Communities of Practice are the networks of people who work together in an organization and who regularly share information and knowledge. Such people may be, but aren't necessarily, part of formal groups or communities.⁹² Communities of practice are held together by shared goals and a need to learn from each other. Wenger claims the central concept of COP is that people find ways to work across boundaries and peripheries and create plausible outcomes.⁹³ The COP concept is useful in supporting knowledge management and strengthening capacity building, particularly for social capital. For example, McIntyre highlights the connections amongst COP, knowledge management, and social capital (such as reciprocity and social networks) in her assertion that “the COP concept lends itself not merely to interpreting action, but as a means to support action and manage knowledge. A community of practice is a style of management based on reciprocity amongst people who wish to pool resources, knowledge and experience to solve problems, because it is in their mutual interest to help one another.”⁹⁴

2.4.2. Knowledge spiral

Because knowledge by itself cannot be created by any types of organizations the fundamental source of organizational knowledge creation is individuals' tacit knowledge.⁹⁵ Tacit knowledge has to be mobilized through four modes of knowledge:

⁹¹ Bassi, op cit., p. 30

⁹² Ibid.

⁹³ Wenger terms boundaries and peripheries by referring to the “edges” of COP. Boundaries refer to discontinuities, to lines of distinction between inside and outside, membership and non-membership, inclusion and exclusion and peripheries to continuities, to areas of overlap and connections, to windows and meeting places, and to organized and casual possibilities for participation offered to outsiders or newcomers. For more details see Wenger, E. (1998), *Communities of Practice: learning, meaning and identity*, Cambridge University Press, p.114-120

⁹⁴ McIntyre, J. J. (2003), “Participatory Democracy: Drawing on C. West Churchman's Thinking When Making Public Policy”, *Systems Research and Behavioral Science*, vol. 20, p. 494.

⁹⁵ Nonaka & Takeuchi, op cit., p. 72

conversion-socialization; externalization; combination; and internalization. ‘Socialization’ is a process of sharing experience and thereby creating tacit knowledge, i.e. technical and experiential skills, and is triggered by building a field of interaction. ‘Externalization’ is a process of transforming tacit knowledge into explicit knowledge which is activated by dialogue or collective reflection and has interaction between individuals as a central feature. ‘Combination’ is a process of systemizing concepts into a knowledge system, involving interaction between varieties of explicit knowledge and activated by a linkage of explicit knowledge. ‘Internalization’ is a process of transforming explicit knowledge into tacit knowledge, activated by learning by doing.

According to Nonaka and Takeuchi the transformation of knowledge is an interaction between tacit and explicit knowledge moving round with several “triggers” through the four modes of knowledge conversion in a “knowledge spiral” (see Figure 2.1)⁹⁶.

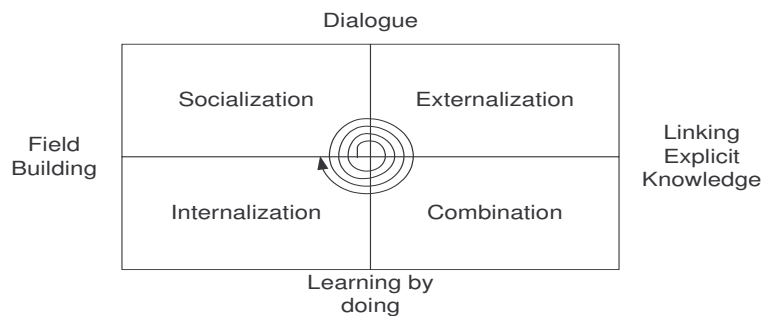


Figure 2.1: Knowledge spiral
(Nonaka & Takeuchi, 1995, p.71)

2.5. Information and Communication Technologies (ICTs)

2.5.1. What are ICTs?

Generally, ICTs include and integrate components from three main contexts: Information, Communication and Technology. The most recent versions form a new medium created by the convergence of Internet, voice, video and data. Combining “the speed of information technology with communication technology, be it landline

⁹⁶ Ibid., p. 71

connections between phones and computers, or wireless digital networks, the result is an unprecedented capacity to access information from practically anywhere”.⁹⁷

Hence, the newest ICTs are the locus of the tremendous potential of three developmental products of information, communication, and computer technologies.

With regard to ICTs, *Readiness for the Networked World: A Guide for Developing Countries*⁹⁸ (or the *Guide*), prepared by Information Technologies Group, Center for International Development at Harvard University, suggested that “ICTs have fundamentally changed the nature of global relationships, sources of competitive advantage and opportunities for economic and social development”. The new technologies, for example personal computers, the internet, and mobile phones have created an interconnected network of individuals, groups, organizations, and communities through a variety of channels of communication and interaction. The more expansion of users in an interconnected network leads to a sharp increase in its value. By participating, states the *Guide*, developing countries not only take advantage of the ability to use the network to communicate and do business with other users but also contribute value to the world.⁹⁹

2.5.2. Information and Communication Technology Needs

2.5.2.1. The convergence of Information and Communication technologies

Conventional media, for example newspaper, radio, and television have played a major role in rural development over many years. However, these traditional media of information and knowledge dissemination are only one-way communication. Rural people, particularly in undeveloped and developing countries, mostly cannot participate in the development processes and have limited choices for their own interests. These people have no choice other than to play a *passive role* in development. They are not only isolated from the national stage in terms of geographical space but also in terms of a space of knowledge and information.

ICTs are the convergence technologies which include Information Technology (IT) and Telecommunication technologies. While IT is largely focused on the

⁹⁷ Ramirez, R. (2000), *Rural and remote communities harnessing information and communication technology for community development*, The University of Guelph, Ontario.

⁹⁸ Information Technology Groups (2001), *Readiness for the networked world: A guide for developing countries*, Cambridge, Center for International development at Harvard University, p. 6. The *Guide* is available at <http://www.readinessguide.org>

⁹⁹ *Ibid.*, p. 3

processing of information, by definition ICTs encompass both processing and communication of information. They have the immense potential of getting vast amounts of information to and from rural populations in a more inclusive timely, comprehensive and cost-effective manner, and could be used together with traditional media such as radio and television.¹⁰⁰ With these technologies, people especially who live in rural and remote areas could play an *active* role and be more involved in the development process by using this potential to connect the people, “rural community, research and extension networks and provide access to the much needed knowledge, technology and services”.¹⁰¹ Also, the information, knowledge and services can be in the form of content and relations to balanced development which are local and understandable. As the theme of human development is the requirement for balanced development, the various forms of those services (such as of information and knowledge) and their content could be seen as *reflexive*¹⁰² relations among technologies and social actors (people, community leaders, and other stakeholders) and the ways the people use the technologies. For example, if the rural people had required services related to early warning systems (such as about drought, pests or diseases), credit, market prices and their competitors, then technologies relating to these services (for instance, Production and Market Information Systems) may be appropriate as long as they are effectively configured for helping the people to access that focused information and knowledge in forms of understandable content and using appropriate technologies in order to expand and energize their economic outcomes. Any efforts (such as the existing ICT initiatives of the School Network, rural telecentres, community internet, and the like) for rural development could create collaborations between the work of local community groups, users of technology and other stakeholders (such as funders and businesses) in the development of those services and contents. My study argues the convergence of Information Technology (IT) and Communication Technology (CT) is a necessary (albeit insufficient condition) for promoting balanced development.

¹⁰⁰ Munyua, H. (2000), *Information and Communication Technologies for rural development and food security: Lessons from field experiences in developing countries*, Food and Agriculture Organization of the United Nations (FAO), [Online, accessed 16 July 2002], <http://www.fao.org/sd/CDdirect/CDre0055b.htm>

¹⁰¹ Forno, D.A. (1999) cited in Munyua, op. cit.

¹⁰² The simplest definition which clearly shows the meaning and its context of “reflexive” is “learning how to learn”. For example, see Lieshout, M.V., Bijker, W.E. & Egyedi, T. (1998), “Social Learning”, in Lieshout, M.V., Bijker, W.E. & Egyedi, T. (eds.), *Social learning in Educational Multi-Media*, [Online, accessed 3 September 2002], <http://www.rcss.ed.au.uk/SLIM/private/I-studies/mvl/mvl.html>

In the developing countries, as the user base expands, costs fall and technologies are adapted to local needs, the potential of information and communication technology will be limited only by human imagination and political will. UNDP (2001a), p. 36

Success in the Information Age, as recommended and stated in the *Guide*, depends on “the widespread integration of information and communication technologies into society-at-large.”¹⁰³ In developed nations, the utilization of ICTs is widely supported by better infrastructure and important social institutions such as hospitals, schools, and government agencies. Conversely, developing countries face imbalanced distributions within these areas. In less developed and developing countries, there is evidence showing that areas lacking telecommunication access see significantly less business activity than those with access, for example, in Botswana, Zimbabwe, and India.¹⁰⁴ Therefore, in general, better ICT infrastructure and widely and effectively use of it in social institutions are required as information and communication technology needs to promote long-term social and economic development successes. The measures of information and communication technology needs in this study, based on some of the *Guide*’s ICT indicators, include two categories: ICT infrastructure; and ICT use in an institution.

2.5.2.2. ICT infrastructure

ICT infrastructure is the minimum essential condition for accessing to both global and local networks. Individuals, organizations and communities cannot participate with the rest of network’s users without accessibility of ICT infrastructure. As stated by the *Guide*, access is a combination of the availability and affordability of the network use, including the hardware and software necessary for the network interface. Speed and quality of the network are a major factor in determining its usage. Service and technical support are essential in maintaining the network and providing service to its users.

¹⁰³ Information Technology Groups, op cit., p. 1

¹⁰⁴ Caspary, G. and D. O’Connor (2003), *Providing low-cost information technology access to rural communities in developing countries: What works? What pays?*, OECD., 2004; Working paper No. 229, p. 10, quoting from Kenny (2001), *Information and Communication Technologies and Poverty*, TechKnowLogia, July/August. And

Arunachalam, S. (2002), *Reaching the unreached: how can we use information and communication technologies to empower the rural poor in the developing world through enhanced access to relevant information?*,

2.5.2.2.1. Information infrastructure

Information infrastructure basically comprises traditional telecommunications infrastructure (telephone line including electric power) and new telecommunications infrastructure such as a number of media that make up the communication network (twisted pair copper wire, coaxial cable, local loop, satellite and fibre optics). In developing countries, the rural telephone plays a key role to promote economic development in rural areas and is the “missing link” for development.¹⁰⁵

2.5.2.2.2. Internet availability

There are quite significant differences in Internet access between developed and developing countries and between urban and rural areas within developing nations in terms of ISP capacity (number of Internet Service Providers [ISPs], number of dial-up lines and services offered), transmission capacity, and public access which are very important in terms of accessibility to network users – both as individuals and organizations. Public access points, for example telecentres, Internet cafes and community information centres, can be “a focal point in various national, regional and local policies to increase ICT awareness and provide training both to the general public and to businesses”.¹⁰⁶ They also provide a potential for freer access to specific services, particularly in rural areas. Public access is also essential for users who do not have access from their homes or workplaces. Public access points may exist and be available for all in public buildings such as schools, libraries, health centres, community centres and post offices.

2.5.2.2.3. Internet Affordability

High fees for basic telephony and ISP services will reduce the number of network users, particularly individual consumers from rural areas in developing countries. It also will limit business users’ time online carrying out, for instance, electronic commerce (e-commerce).

¹⁰⁵ Ramirez, op cit., p.77. Ramirez shows that a number of ICT experts, both individuals and organizations (such as ITU), make this claim about the rural telephone, both landline and wireless that achieving basic telephony is a major goal in developing countries.

¹⁰⁶ Information Technology Groups, op cit., p.3 and

OECD (2001), *Information and Communication Technologies and rural development*, Paris, p. 86, [Online, accessed 07 January 2002], <http://www1.oecd.org/publications/e-book/0401081e.pdf>

2.5.2.2.4. Network speed and quality

Accessing information and a variety of services and supports through the Internet is very popular globally. Some of these are now carried in multimedia formats which include texts, voices, and animations as well as video streaming. To provide for full availability, an information and communication network requires a reliable and affordable telecommunication infrastructure with high bandwidth, and reasonable pricing from government and private ISPs to provide public services (education, health service, etc.) particularly in rural areas.¹⁰⁷ Such a network would have to be of high quality, characterized by a very low number of mainline faults, poor connections, dropped connections or packet loss, which would affect ICT usage and investment.

2.5.2.2.5. Hardware and software

The *Guide* and ICT experts referred to in the OECD report agree that low-priced hardware and application software customized to local needs are remarkably important in a developing country context where there is a high proportion of low-income people who cannot afford high-priced hardware and computer software.

2.5.2.2.6. Service and support

Long waiting periods of installation and adequate maintenance are major barriers to successful ICT use, especially in remote areas in developing countries. The *Guide* highly recommends that good quality and strong technical supports be made available to sustain the network and provide service to customers.

2.5.2.3. Institutional ICT use

2.5.2.3.1. Access to ICTs

Regional and local institutions, for example educational institutions (university, college and school), firms, and communities must be interconnected into a learning system. “Without an educated, ICT-savvy populace, no community can fully participate” in both global and local networks.¹⁰⁸ However, different educational institutions in different areas – urban versus rural - may gain unequal benefits according to the institutional resources (infrastructure, technological availability, application software and human resources) they are embedded in. For example,

¹⁰⁷ OECD, op cit., p. 90

¹⁰⁸ Information Technology Groups, op cit., p. 7

Casparry's report concludes that in developing countries telecentres in universities, which are mostly in urban areas, have "obviously little impact on those with little formal education, and hence on the mass of the rural poor".¹⁰⁹ Moreover, telecentres in universities and schools in urban areas are commercial ones or commercial franchises which usually focus on commercial interest but are unlikely to target the poor and 'marginalized communities'. Therefore, it is important to interconnect these types of telecentres in urban areas into those in rural areas, especially in schools, in order to help the poor and marginalized communities in accessing online information and services.

2.5.2.3.2. Enhancing Education with ICTs

The *Guide* claims that the new technologies should be used as tools to promote and improve the learning process in school by providing teachers with training to use the internet and computers to benefit their students. "Curricula must be redesigned to encourage the use of ICTs in the pursuit of problem solving, group training and research" and then students should be taught to use the technology to improve their learning experiences.

2.5.2.3.3. Developing an ICT workforce

Beyond an adequate telecommunication infrastructure influencing the diffusion of ICT use and ICT related businesses, a workforce with higher ICT skills is another key need.¹¹⁰ It is necessary to develop and promote current and future ICT workers with essential ICT skills such as software development, hardware engineering and Web design. In addition, as is underscored by the *Guide*, maintenance, support and other very important ICT professional skills should be offered to ICT workforces so the technology can be utilized efficiently in remote areas.

2.5.2.3.4. Locally relevant content

"Community members find the Internet medium more useful and relevant to their own lives when online content reflects their own interests and needs".¹¹¹ In June 2000 the FAO and its World Agricultural Information Centre (WAICENT) organized

¹⁰⁹ Casparry (2002), *Information Technologies to Serve the Poor: How Rural Areas Can Benefit from the Communications Revolution*, p.3, [Online, accessed 02 March 2003], <http://www.dse.de/zeitschr/de102-3.htm>

¹¹⁰ OECD, op cit., p. 74

¹¹¹ Information Technology Groups, op cit., p. 9

the First Consultation on Agricultural Information Management. This noted that, apart from physical access, essential concerns should include timely information, retrievable and easily applied by a broad range of users, accessible in their own languages and consistent with their interests and.¹¹² The FAO also called for relevant information providers, such as agricultural and rural development agencies, to work co-operatively to identify various users' information needs in order to "develop user-specific, locally sensitive content, and applications". At the same time, "procedures should be implemented to enable feedback and widen participation in the development of these information resources."

2.5.3. ICT as an enabler of balanced development for developing countries

Some of ICTs' roles as an important tool to help achieve development goals are identified by technological analysts as: building and developing community capacity; developing and promoting social capital; developing democracy and participation; creating new opportunities for users; eliminating barriers in the flow of information and services; and promoting efficiency in business activities in the developing world.

2.5.3.1. Building and developing community capacity

ICT can be applied to a wide range of improving human capital.¹¹³ It is multifunctional and flexible in coping with the diversity of community needs, based on personalization and localization. To fulfill this, ICT fosters the dissemination of information and knowledge which flows through geographical spaces allowing people in remote and urban areas to be integrated into national networks to capture, share, and utilize information and knowledge, in order to create and improve the capacity of community and country.

2.5.3.2. Developing and promoting social capital

As mentioned earlier, Putnam's concept of social capital comprises connections, norms, networks, and trust transferable from one social setting to another and that, "unlike conventional capital (for instance physical or economic capital), social capital is a public good, that is, it is not the private property of those who benefit

¹¹² Gurstein, M. (2000), *The role of information and communication technologies in rural development and food security*, Food and Agriculture Organization of the United Nations (FAO), p.2, [Online, accessed 11 September 2002], <http://www.fao.org/sd/CDdirect/CDre0055c.htm>

¹¹³ Bassi, op cit. He defines "human capital" as the knowledge, skills, and competencies of people in an organization. It is the constant source of creativity, innovation and ability to change.

from it.”¹¹⁴ Edgar describes it as a thing that “grows out of social interactions and networks we experience in our daily lives. It is not a quality of individuals but, rather, a quality of a group or community as a whole.”¹¹⁵ Interestingly, part of the problem facing people, groups and organizations as community members in rural areas is that they lack ‘connections’, especially external ones, with other groups of people, communities in different areas. Their community activities, both economic and social, rely only on their own resources and internal connections within an isolated community.

Networks (even virtual ones formed by using the new technologies) are able to provide community members with access to development resources and exchange ideas, information, and all benefits with the rest of the world. The award-winning Information Village project of the M.S. Swaminathan Research Foundation, Chennai, India, is a successful case study in connecting the indigenous people to other outsiders across the country and the entire world by using ICTs and Internet connectivity as a solution of social interactions.¹¹⁶ In developed countries, community members in Silicon Valley, California, have networks and social interaction as central to business success by taking the advantages of ‘the flourishing and open communication’ to facilitate cooperation for mutual benefit between rival business groups.¹¹⁷ The point I am making in section 2.5.3 is that connections could enhance the life chances of those who are socially and economically excluded in my case study.

2.5.3.3. Developing democracy and participation

The use of new technologies, methodologies, and techniques in the most effective manner can help to promote participation, provide and share information, knowledge, and skills for social and political changes.¹¹⁸ Governments can enhance the quality and responsiveness of the public services they provide to their populace by using ICTs. Meanwhile, they can increase the reach and accessibility of services and public infrastructure by employing e-government applications which are able to

¹¹⁴ Putnam, op cit, p. 2

¹¹⁵ Edgar, op cit, p. 101

¹¹⁶ Arunachalam, op cit, p. 518

¹¹⁷ Edgar, op cit, p. 101

¹¹⁸ Balit, S. (1998), *Listening to farmers: Communication for participation and change in Latin America*, Food and Agriculture Organization of the United Nations (FAO), p.1, [Online, accessed 07 August 2002], <http://www.fao.org/sd/Cddirect/Cdan0018.htm>

provide the citizens information and services through the Internet and other communication networks.¹¹⁹ ICT mechanisms, for example electronic forum and bulletin boards, can encourage the citizens to participate in public discussions and the democratic process. The Accenture's report claims that this is particularly relevant for "marginalized communities and groups such as women, youth, and ethnic minorities: they can share and exchange information of mutual interests, strengthen their collective power and shape their own development solutions."¹²⁰

2.5.3.4. Creating new opportunities

This can occur from increasing convenience and choice for clients and consumers, expanding market reach for businesses, supporting fair returns on local products and services and enabling new business models to develop. The UNDP's human development report (2001) stated that, regardless of technology stock decline and the downfall of digital companies, "information and communications technology and related industries are among the most dynamic sectors of the global economy."¹²¹ Developing countries still have a chance to expand their existing exporting markets, create new markets and new good jobs and extend their economies by reaping the advantages of the new technologies. Moreover, the report expressed the opinion that with the progress of wireless technology such as mobile phones which are able to provide wireless services through internet connection, which was presumed to get ahead of internet usage via the desktop computer by 2005, "people and businesses in developing countries will become increasingly able to access valuable Internet-based information."¹²²

2.5.3.5. Eliminate barriers in the flow of information and services

ICTs can provide access to information to clients and customers on the network, reducing the transaction costs of poor farmers and traders or allowing individuals, groups, and organizations to obtain better information and services and to enhance the processes of government. For example, an Internet network connecting farmer organizations in Chile has significantly increased the farmers' income by

¹¹⁹ Accenture (2001), *Creating a development dynamic: Final Report of the Digital Opportunity Initiative*, p.15, [Online, accessed 04 January 2002], <http://www.opt-init.org>

¹²⁰ Ibid.

¹²¹ UNDP (2001a), op. cit., p. 36

¹²² Ibid.

sharing relevant agricultural information such as marketing of farm products (how, where and how to get best prices), plant diseases, and so on.¹²³ Other important public services could also be accessible for such users, such as education (distance learning, for instance) and health services. One can consider any regional and local initiatives in the fields of distant learning and health care systems, in particular useful and local content, based on the concepts of information, possible resources, and knowledge sharing through the digital network.

2.5.3.6. Promote/Contribute to income generation and poverty alleviation

ICTs can be used to develop entrepreneurship; increase competitiveness, process efficiency and transparency of operations; streamline rural product and service delivery; and enhance the capability of developing countries to participate in the worldwide economy.¹²⁴

Besides improving the quality of life for citizens, the potential uses of ICTs can be implemented to facilitate public and private sector activities, share knowledge and improve access to information, including in the business sector.¹²⁵

However, as a technological expert states, “ICT is not a panacea for the developing world’s problems.” Social and economic development is dependent on many factors, which should be addressed through an integrated development strategy.¹²⁶

2.5.4. Building and developing community capacity

UNDP’s Human Development Report (2001) focused on the issue of making new technologies work for human development and emphasized that technological innovation affects human development in two ways.¹²⁷ First, “it can directly enhance human capabilities.” Technological innovations, such as Internet access for information and communications, can directly improve people's health, nutrition, knowledge and living standards, and increase their ability to participate more actively in the social, economic and political life of a community. Internet-based information

¹²³ Accenture, op. cit., p. 13

¹²⁴ ITU (2002), *ITU World Telecommunication Development Report 2002: Reinventing Telecoms*, International Telecommunication Union (ITU) and Information Technology Groups, op cit.

¹²⁵ Mansell, R. and U., When (1998), *Knowledge Societies: Information Technology for Sustainable Development*, New York, Oxford University Press

¹²⁶ Accenture, op. cit., p.9

¹²⁷ UNDP (2001a), op. cit., p. 28

about many products, for example, drought-tolerant plant varieties for farmers in uncertain climates, vaccines for infectious diseases, clean energy sources for cooking, are available online for people who are able to access and acquire it.

Second, technological innovation is a means to human capability development because of it can increase the productivity improvement which leads to economic growth. Future development strategies, especially for rural development, should depend on the changes which include technological transformation and its impact on development as the UNDP report stressed that “no individual, organization, business or government can ignore these changes and the new terrain requires shifts in public policy – national and global – to harness today’s technological transformations as tools for human development.”¹²⁸

2.5.4.1. Developing and promoting democracy, social capital and participation

The convergence of communication, information and the new technologies theoretically can empower rural people and give them a powerful voice of involvement in the development process in economic, social, and political areas. According to Balit, as quoted by Munyua, with the potential of ICTs, “rural communities can acquire the capacity to improve their living conditions and become motivated through training, participation, and dialogue with others at a level where they make decisions for their own development.”¹²⁹ As Hardy argues, in Caspary’s work, if telephones contribute at all to economic development, it is most probably through the expansion they make possible for social networks beyond the immediate neighbourhood, the better co-ordination of entrepreneurs over long distances, and the timely access they can provide to valuable information (particularly but not only price information).¹³⁰ ICT policies have to focus on economic and social development by implementing the combination of telecommunication infrastructure, higher education, physical infrastructure (technology and software parks) and human networks connecting academia and business.

¹²⁸ Ibid., p.27

¹²⁹ Munyua, op. cit., p.3

¹³⁰ Caspary, G. and D. O'Connor, op cit., p. 10

2.5.4.2. Sustainability and the triple bottom line

ICT applications aim to enhance the interconnectedness among business leaders, governments and other stakeholders to support people's learning and capacity building across boundaries. Sustainability is not solely the responsibility of the state sector but needs a partnership between relevant sectors – state, corporate, community and civil society. According to John Elkington, sustainability is “the principle of ensuring that our actions today do not limit the range of economic, social, and environmental options open to future generations.”¹³¹ Elkington urges all beneficiaries who get involved in developments, especially business leaders and executives in corporate and private sector, to focus on his new concept called ‘the triple bottom line’, which aims to achieve goals of sustainable development in relation to the social, economic and environmental bottom lines.

The Elkington triple bottom line comprises significant three characteristics “emerging at the interfaces between each of these great agendas (social, economic, environmental bottom lines) in the shear zones”, which are:¹³²

- 1.) Society depends on the economy and the economy depends on the global ecosystem, whose health represents the ultimate bottom line;
- 2.) The three bottom lines are not stable; they are in constant flux, due to social, political, economic and environmental pressures, cycles and conflicts. So the sustainability challenge is tougher than any of the challenges in isolation;
- 3.) Each bottom line moves independently of the others and they will vary over time and space. More importantly, our development activities from all relevant sectors impact on the ultimate bottom line.

To meet sustainable development goals dealing with the great number and behavior of actors and requirements (such as of accountability, justice, benchmarking, intergenerational equity and so on) in the social, economic and environmental areas by taking a consideration on the advantage of new technologies, ICT applications therefore have to bring possible resources together to help all stakeholders work in

¹³¹ Elkington, J. (1997) *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*, Capstone, Oxford, p. 20

¹³² Ibid., p.73, 80

partnership. This is to enhance not only financial and physical forms of capital, but also natural, human and social capital. To improve the formulation of the learning process and its policy it is relevant to consider the human side of developments, such as capacity building, entrepreneurial capabilities and knowledge management approaches.

2.5.4.3. System design: The challenges

In the ICT designing process, not only the key principles of Thailand's local agenda 21¹³³, but also the characteristics of rural community and its future concern as a dynamic society should be taken into account in:

- i.) An ICT model for low-cost access in rural areas; with
- ii.) A Knowledge society as a goal

2.5.4.4. Capacity building: ICT capacity development

Simon Batchelor purposed “planning with an onion” as rules of engagement regarding to ICT project development when working with communities.¹³⁴ Batchelor's ‘planning with an onion’ mainly focuses on building the capacity of a community or local organization, in order to ensure that it has resources and inputs to support sustainable development programmes and projects by considering and defining the five planning processes which can be described in the Figure 2.2 “planning with an onion” below.

¹³³ Which will be explained in more detail in section 2.5, ‘Sustainable Development and Local Agenda 21’.

¹³⁴ Batchelor, S. (2002), *ICT capacity development issues*, [Online, accessed 10 January 2002], <http://www.capacity.org/ict/editorial1.html>

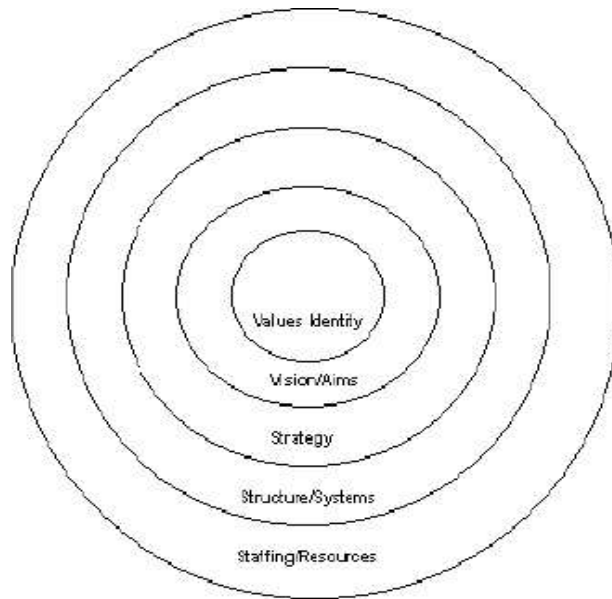


Figure 2.2: "Planning with an onion"

(Source: Batchelor, 2002, p.2)

The planning processes include five layers which are considered start at the centre and plan outwards. They are: 1) values identity, 2) vision and aims, 3) strategy, 4) structure and systems, and resources and staffing.

2.5.4.4.1. Values identity

ICT programme and project should start at the inner of the “onion” rather than from its outer of edge. Batchelor argues that defining and discussing the values of community is essential and “not with an inventory of existing and proposed resources” by only the external stakeholders. Participatory involvement of the relevant stakeholders (especially the stakeholders within the community) is important.¹³⁵ According to Talcott Parsons, a concept of shared values refers “to a consensus of morals, principles and standards of behaviour.”¹³⁶ It is a set of shared values which are generated “in intimate settings in which people deal with one another face to face” associated with their interpersonal relationships, work life and neighbourhood or regional place activities that make for a sense of community.¹³⁷ They can be either personal, family, community, organizational, religious beliefs such as openness, localness, freedom, responsibility, caring, merit, and other core values that have equal meaning at work and in the family. Practices, processes, and strategies could change

¹³⁵ Ibid.

¹³⁶ Bilton, T., et al. (1996), *Introductory Sociology*, Hampshire: Macmillan, p. 672

¹³⁷ Etzioni’s the Spirit of Community quoted by Edgar, op. cit., p. xv.

over time in answer to community or organizational challenges, but its values will remain the same in providing enduring source of strength and wisdom.¹³⁸ ICT programme and project, as Batchelor's claim, should acknowledge these core values that tie people to help each one another to building a sense of community at first stage of planning process rather than general need for information and communication put in as significant resources by outside agencies.

2.5.4.4.2. Vision and Aims

The second set of the planning processes contains the shared vision and aims of community. Relevant stakeholders, especially professional external stakeholders, who involved with ICT programmes and activity "would do well to learn from other sectors such as water and agriculture", not were treated as isolated sectors.¹³⁹ The aim to do so is to create and combine mission, vision, and values that can assist in building a shared or common identity, such as shared vision and shared values for example, which may connect and encourage thousands of people within the large community to work together better, in particular people or officers in public and private sectors.

A vision is "the "what?" or the picture of the future we seek to create" and a shared vision is "that many people are truly committed to, because it reflects their own personal vision."¹⁴⁰ Peter M. Senge states that people are well connected and bound together by a common aim when they share a vision truthfully.¹⁴¹ The shared vision and aim at this stage could reflect the shared values which are truly stable sources of strength and wisdom of local people and community. The combination of mission, vision and values of people and exists in local organization should be considered and accepted as human and social assets of community to create local capacity for development. And this consideration then is essentially taken into account to be an element to influence the possible strategy in the planning processes.

2.5.4.4.3. Strategy

Strategy associated with ICT capacity development programme and project should respond to diverse livelihood priorities of internal stakeholders in the

¹³⁸ Niven, P. R. (2003), *Balanced scorecard step-by-step for government and not-for-profit agencies*, New Jersey: John Wiley & Sons, p. 112

¹³⁹ Batchelor, op. cit. p. 3

¹⁴⁰ Senge, P.M. (1990), *The Fifth Discipline - The Art and Practice of the Learning Organization*. New York: Currency and Doubleday, p. 206, 223

¹⁴¹ *Ibid.*, p. 206

community.¹⁴² Community livelihood aim and vision as well as its values reflect to ICT applications, for example its contents and services including other infrastructure, which will be put into the capacity development program by external stakeholders at diverse levels - organizational, sectoral, national and international levels. ICTs should be added as parts of overall strategy to improve the community livelihoods. Wireless communication through mobile phones and email system, are examples of important elements of ICT strategy, can help residents inside community to communicate with others both inside and outside their own areas in order to deliver necessary messages and services including meeting arrangements. Moreover, ICT skills such as computing and technical skills are quite useful or advantageous for seeking a job for students or users who attain those skills. ICT facilities ICT strategy should focus on sustainable development and involve participation of the community not just only at the user level but also at the control and management level.

2.5.4.4.4. Structure and Systems

The development of local capacity will vary depending on the resulting structure and systems which flow from vision, aims and strategy. If the vision and aims are to encourage people to work together better as a part of development cooperation between internal and external stakeholders, in particular people or officers in public and private sectors, structures of ICT capacities need to be considered as follows:¹⁴³

- Individual capacity,
- Organizational capacity,
- Sectoral capacity and
- National capacity

2.5.4.4.5. Resources and Staffing

Various strategies at different levels (individual, community, organizational, inter-organizational/network) should be involved in developing the ICT model. To address development problems effectively, ICT and ‘digital’ information must be combined with local human resources and tacit knowledge¹⁴⁴. From international level to the national level and down to region, city and local authorities, actions can be

¹⁴² Batchelor, op. cit

¹⁴³ ECDPM. (2003), *Developing capacities for ICT enabled development*. Retrieved January 30, 2004 from <http://www.capacity.org>

¹⁴⁴ Mansell and When, op. cit, p. 1

classified by certain characteristics combining the previously mentioned development models - capacity building, entrepreneurship, communities of practice, sustainable development, and knowledge management. ICT components of resources and inputs such as computers, software, cables, personnel, training etc need to be effectively exploited to transform data and information into useful knowledge and services to help all relevant stakeholders in reducing the gap between ‘the haves’ and ‘have-nots’ among different sectors. Moreover, the government and other advantaged stakeholders have to design and implement effective national strategies which focus on the difficulties of using ICTs to help and support the process of data and information transformation.¹⁴⁵

2.5.4.5. Applications: Contents and services

Beyond physical tangible provisions such as telecommunication infrastructures, information and knowledge and services need to be timely, retrievable and easily applied by various users, accessible in their local language and consistent with their values.¹⁴⁶ ‘Contents’ comprise resources necessary to strengthen users’ core capabilities, entrepreneurial capabilities and skills, as well as to promote their activities across boundaries. ‘Services’ are not only relevant and helpful to serve the needs of people and institutions, but also designed to be friendly and easily usable.

2.5.4.6. Barriers to access basic ICTs in rural community

Barriers to access basic ICTs can impede the progress of human development, because “access to information is as central as education to building human capabilities”.¹⁴⁷ Apart from lacking basic telecommunications infrastructure and software and hardware equipments, remote areas have experienced inevitable barriers to access to the new technologies, comprising physical, economic, educational, and socio-cultural/political obstacles.¹⁴⁸ Moreover, in the 2001 UNDP report on ICT, Duncombe and Heeks claim that there is a variety of evidence from research on ICT in development programmes confirming that “information is important, but it is only one

¹⁴⁵ Ibid., p. 7

¹⁴⁶ FAO (2000), *The role of information and communication technologies in rural development and food security*, Food and Agriculture Organization of the United Nations (FAO), [Online, accessed 16 July 2002], <http://www.fao.org/sd/CDdirect/CDre0055.htm>

¹⁴⁷ UNDP (2001a), op. cit., p. 35

¹⁴⁸ UNDP (2001b), *ICT for development, UNDP Essential: Synthesis of Lessons Learned*, p. 8, [Online, accessed June 30, 2004], <http://www.apdip.net/documents/policy/actionplans/Essentials05092001.pdf>

part in a chain of resources (infrastructure, skills, money) required for the end-user to have a capacity to act. If these other resources cannot be sourced, then, there is no point providing information via ICTs (or via other means) as it will be of no value.”¹⁴⁹ The following obstacles to ICT access needed to be identified by top-level policy-makers and stakeholders to ensure that technologies will be accessible by rural beneficiaries. They are:

2.5.4.6.1. Physical barriers to access and participation

In rural and remote areas, sparse population, isolation, and poverty lead to little political incentive for setting up ICT initiatives and insufficient motivation for undertaking ICT development from public and private sectors. The new technologies like the Internet need high levels of investment in computing equipment, training, maintenance, and outreach and network access.

2.5.4.6.2. Economic barriers to access

The new technologies require huge investment in hardware, software, and human resources. Maintenance and recovery costs to keep the technologies working are vital. Users have to pay for services. Therefore, most rural people are unable to access to basic ICTs.

2.5.4.6.3. Educational barriers to access

Most relevant contents and services provided by the new technologies in the networked world are currently dominated by English, requiring English literacy to use and understand their contexts effectively. These are intimidating barriers for end-users who are illiterate both in urban and rural areas across non-English countries.

2.5.4.6.4. Socio-cultural/political barriers to access

According to the UNDP report, socio-cultural barriers to access refer to factors that “can cause individuals (or whole sectors of society) to 'self-exclude' themselves from participation... .” People think that an ICT programme does not belong to them or their communities. This problem is called ‘*technophobia*’ by Baron, quoted in the report. Technophobia occurs because many people “are fearful and suffer feelings of inferiority when it comes to using this equipment.” These factors include everything

¹⁴⁹ Ibid., p.12

from how people feel about the technologies, through their perceptions of accessible digital worlds and their insecurities based on social class, age, and employment status.

2.6. Sustainable Development and Local Agenda 21

2.6.1. What is Sustainable Development?

Barbier (1987) describes two different main concepts of economic development: one focusing on basic needs which help the poor as the first priority; the other with an underlying aspect that real development should be steered by taking into account the environment, local social and cultural values and enabling stakeholder participation.¹⁵⁰ According to the World Commission on Environment and Development (WCED), there are two roots which lock and move the world away from sustainability: *market failures* and *policy failures*.

Market failures are ‘where economic transactions fail to take account of social and environment costs.’ Meanwhile, policy failures are where ‘governments inadvertently encourage environmental degradation or social problems.’¹⁵¹ To deal with this decline, in 1987 the WCED chaired by Gro Harlem Brundtland produced the Brundtland Report stating that reducing environmental degradation and increasing the standard of living of all people are inextricably linked. The report termed the most universal definition of sustainable development is that ‘economic and social development that meets the needs of the current generation without undermining the ability of future generations to meet their own needs.’

The Brundtland definition of sustainable development is interpreted and categorized, by Dalal-Clayton and Bass, into two components: a commitment to meet ‘the needs of the current generation’; and meeting such needs ‘without compromising the ability of future generations to meet their own needs’.¹⁵²

‘Meeting the needs of the current generation’ means satisfying:

- Economic needs - including access to assets providing an adequate livelihood or productive economic activity; also economic security when unemployed, ill, disabled or otherwise unable to secure a livelihood;

¹⁵⁰ Dalal-Clayton, B., and Bass, S. (2000), ‘National Strategies for Sustainable Development: The Challenge Ahead’, p. 8, [Online, accessed January 20,2004], <http://www.iied.org/docs/spa/epi25.pdf>

¹⁵¹ Ibid.

¹⁵² Ibid.

- Social, cultural and health needs - including a shelter which is healthy, safe, affordable and secure, within a neighbourhood with provision for piped water, drainage, transport, health care, education and child development, and protection from environmental hazards; and
- Political needs - including freedom to participate in national and local politics and in decisions regarding management and development of one's home and neighbourhood, within a broader framework which ensures respect for civil and political rights and the implementation of environmental legislation.

Meeting the above needs 'without undermining the ability of future generations to meet their own needs' means satisfying:

- Minimising use or waste of non-renewable resources - including minimising the consumption of fossil fuels and substituting with renewable sources where feasible. Also, minimising the waste of scarce mineral resources (reduce use, re-use, recycle, reclaim);
- Sustainable use of renewable resources - including using freshwater, soils and forests in ways that ensure a natural rate of recharge; and
- Keeping within the absorptive capacity of local and global sinks for wastes - including the capacity of rivers to break down biodegradable wastes as well as the capacity of global environmental systems, such as climate, to absorb greenhouse gases.

Nowadays, Dalal-Clayton and Bass claim that sustainable development fundamentally is based on the integrated development of three pillars:

- (1) Economic development which focuses on the creation of wealth and livelihood;
- (2) Social development which stresses the eradication of poverty and promotes the quality of life of people; and
- (3) Environmental development which aims to improve and maintain good environment for both the current and next generations.

They also draw up the interrelationship of the three pillars, called the systems of sustainable development, which overlap each other as shown in Figure 2.3 below. The objectives of social, economic and environmental development need to be together set in a common goal by working in partnership across public or state, corporate and

community sectors at local, national and international levels. The sustainable development will “entail integration of these three objectives where possible, and making hard choices and negotiating trade-offs between objectives where integration is not possible.” To meet and respect the particular needs and different situations of diversities within a nation, state, society and culture, the ‘possible’ area comes down to the integration of the objectives of social, economic and environmental development. Meanwhile, the ‘not possible’ integration which needs negotiations includes important factors, for instance, peace and security, prevailing economic interests, political systems, institutional arrangements and cultural norms.¹⁵³

¹⁵³ Ibid.

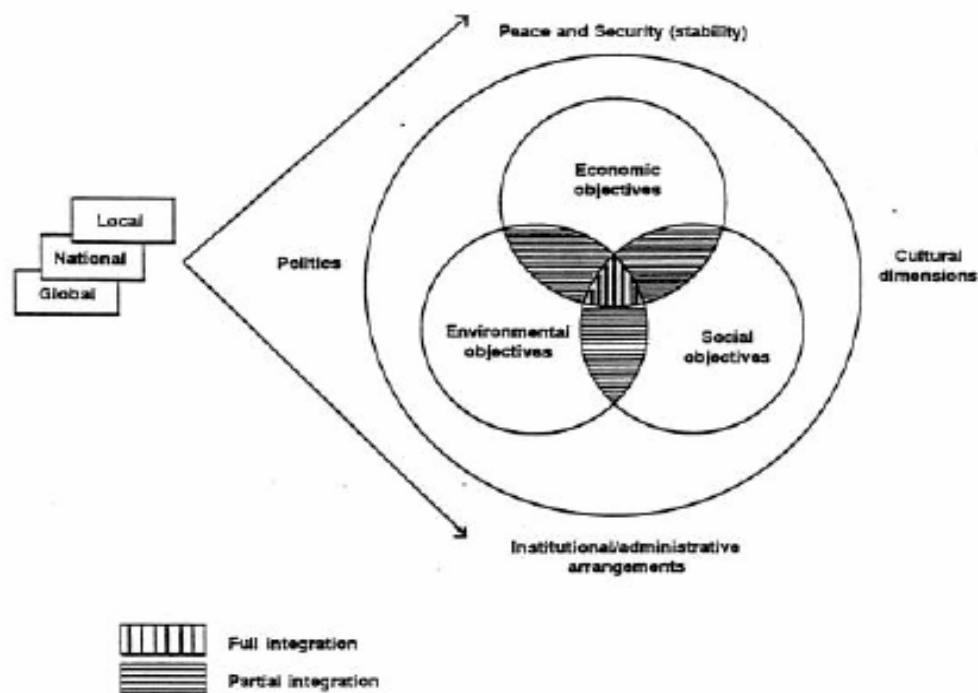


Figure 2.3: The system of sustainable development
 (Source: Dalal-Clayton and Bass, 2000, p.10)

Furthermore, CEMR classifies the six key principles of sustainable development which include:¹⁵⁴

1. *Environment*: The physical 'carrying capacity' of the environment imposes limits to many human activities and means we must reduce our consumption of resources. We must live within these so that we pass the planet on to our descendants with its ability to support human life undamaged;
2. *Futurity*: We have a moral duty to avoid 'compromising the ability of future generations to meet their own needs';
3. *Quality of life*: Human wellbeing has social, cultural, moral and spiritual dimensions as well as material;

¹⁵⁴ CEMR (1997), 'Local Agenda 21 Basic guide', [Online, accessed January 20, 2003], www.agenda21.ee/Juhend/basicg.doc

4. *Equity*: Wealth, opportunities and responsibilities should be shared fairly between countries, and between different social groups within each country, with special emphasis on the needs and rights of the poor and disadvantaged;
5. *Precautionary principle*: if we are uncertain about the environmental effects of any actions/developments we should apply this principle and err on the side of caution;
6. *Holistic thinking*: solving a complex sustainability problem requires that all the factors that contribute to that problem be incorporated in the solution

Achieving sustainable development objectives requires the integration of the economic, social and environmental dimensions as a basis of a balanced and integrated development approach which supports and works together within a governance of society that ensure full participation and accountability across governance sectors at all levels.

2.6.2. Agenda 21 and Local Agenda 21

Agenda 21

The Agenda 21 document was released by the 1992 Rio Earth Summit and established as guidance for nations and states to develop national or state policies and programmes to promote more environmentally, socially and economically sustainable development processes. However, the Agenda 21 is not a compulsory agreement by governments which signed it. They can develop and deliver the Agenda 21 programme by adopting some its recommendations, depending on their own needs and situations.¹⁵⁵

Because sustainable development requires involving all citizens in their area of responsibility in the community; in business, administrations, political offices, societies or private households, Agenda 21 argues that local authorities or local governments can ‘play major roles’ in developing the local economy effectively because,¹⁵⁶

¹⁵⁵ Patterson and Theobald (1999) quoted in Lucas, K., et al. (2001), 'Local Agenda 21: When is it a model for joined-up community based activity? Working Paper 1:Literature Review', [Online, accessed December 30,2003], http://www.wmin.ac.uk/cfsd/reports/JRF_LA21_Literature_review.pdf

¹⁵⁶ ICLEI (2004), "What is Local Agenda 21?" [Online, accessed May 07, 2004], <http://www.iclei.org>

As the level of governance closest to the people, they play a vital role in educating, Mobilizing and responding to the public to promote sustainable development. (Agenda 21, 28.1)

Local Agenda 21

Local Agenda 21 is “the process where local authorities work in partnership with all sectors of the local community to draw up action plans to implement sustainability at the local level.”¹⁵⁷ The Council of European Municipalities and Regions (CEMR) argues that local Agenda 21 is special for a number of reasons:

- There is a mandate for it agreed by the United Nations, and local authorities around the world are committing themselves to the process;
- It recognizes the key role of local authorities in achieving local sustainability;
- It is about showing global responsibility - both by reducing our own environmental impact and our effect on distant communities, and by sharing ideas and expertise with others, particularly in developing countries, to help them minimise their own environmental impact;
- It calls for the participation of all sectors in the local community and supports local democratic processes;
- It is more than just a 'green' plan - it is about the integration of environment, social, economic and cultural issues and is about the quality of life of all local people.

Local Agenda 21: 7 principles

Any programmes of development approaches cannot be delivered without the commitment and cooperation of local government and stakeholders in rural and remote areas. In order to meet balanced or sustainable development goals, the 7 guiding principles of Local Agenda 21 will be taken into account in this study. The guiding principles comprise:¹⁵⁸

¹⁵⁷ CEMR, op cit.

¹⁵⁸ LGMB (2004), *Roundtable Guidance*, [Online, accessed 9 March 2004], <http://www.lgmb.org.uk>

- Partnership: The development approach will only thrive on shared objectives, agreement on goals, and mutual action; on pulling together, not pushing apart;
- Openness and accessibility: Information and ideas need to be openly available to all, active people and groups should be accessible to all;
- Honesty: One cannot do everything and limits are inevitable, so always be direct and honest about what is and is not –on offer in any situation;
- Relevance: Start with people’s own interests and concerns, skills, knowledge, and experience; making links between these and broader concerns;
- Achievement: Plan carefully, to target scarce resources to achieving actions which add up over time to a sustainable programme;
- Learning from experience: There are risks, there are unknowns, everyone makes mistakes; the important is to learn from them, not use problems as excuses;
- Commitment: If people have got it, you will get it; if you have got it, they will get it. Then it builds up through the tough time.

Unless the communities have a sense of ownership of knowledge management centres, it will be difficult to sustain them. It is only a user driven and managed system that will be replicable and capable of developing a self-propelling momentum.¹⁵⁹ Therefore, local governments or authorities should realize their crucial roles to play in sustainable development because they:¹⁶⁰

- Represent and work on behalf of the local community;
- Have a significant planning role;
- Carry out, commission or influence many of the services on which local quality of life depends;
- Manage/own large parts of the built and natural environment;
- Can greatly influence others through education, advice, information and example;
- Can catalyze partnerships with other organizations; and

¹⁵⁹ M S Swaminathan Research Foundation (2003), *Village Information Centres: Harnessing Local Knowledge Via Interactive Media*, [Online, accessed 3 September 2004], <http://www.eldis.org/fulltext/policymakers.doc>

¹⁶⁰ CEMR, op cit.

- Have large direct impacts as substantial consumers, purchasers and employers.

Also, they have to establish their Local Agenda 21 programme guided by the seven components of a Local Agenda 21 process by working together with the governance of society or all stakeholders in the area. According to CEMR, the seven components of a Local Agenda 21 process are divided into two groups:

Group A.) Actions within the local authority/municipality, which are:

- (1) Managing and improving the local authority'/municipality's sustainability performance; and
- (2) Integrating sustainability into the local authority/municipality's projects, plans, policies and activities.

Group B.) Actions in the wider community, which include:

- (3) Awareness raising and education;
- (4) Consulting and involving the wider community and the general public;
- (5) Partnership action;
- (6) Producing a local sustainability strategy or action plan;
- (7) Measuring, monitoring, reporting and reviewing progress.

However, it should not be an obligation of the state sector to provide all possible sources and all its available resources in order to achieve the goals of an integrated development approach combining multi-disciplinary knowledge. Other relevant stakeholders from the corporate or private sector and the civil society sector, including volunteers and family sectors, have to work together as the networks of partnerships to carry out the tasks. The networks of partnerships conveyed by the multi-disciplinary knowledge and the advantages of the new technologies are at the heart of my study.

2.7. Kabeer's Social Relations Approach

According to March et al., Kabeer describes “an institution” as “a framework of rules for achieving certain social and economic goals” which “ensure the production, reinforcement, and reproduction of social relations and thereby create and

perpetuate social difference and social inequality.”¹⁶¹ According to Kabeer’s Social Relations Approach for analytical purposes, there are four key institutional domains that generate “cross-cutting inequalities” (such as gender, class, urban and rural and so on) of people based on their positions in the structure and hierarchy of their society, namely, the state, the community, the market and the household. Figure 2.4 below is an example showing the four key institutions and their social relationships. However, the main bases of differences and inequalities are not only caused by the household and family, but also recreated across different sectors of institutions, the international community, the state and the market place.¹⁶² A change in policy or practice in one institution, such as the state or the market, can cause changes in the community and family, and changes in the community and family have an impact on the other spheres – the state and the market.

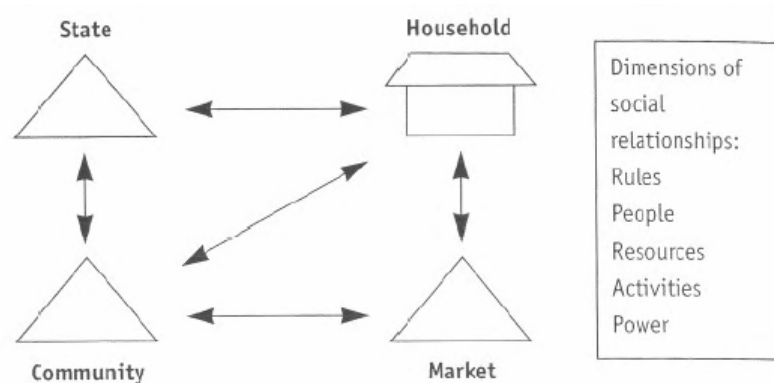


Figure 2.4: Social Relations concepts - Key institutions and their relations

(Source: March et al., 1999, p. 108)

In order to understand how social difference and inequalities in roles, responsibilities, claims and power are formulated, reformulated, sustained and reinforced through different institutions it is essential to “undertake an institutional analysis”, the examine the institutions on the basis of their rules, activities, power and control over structures, access to or distribution of resources. Such an analysis, based on those dimensions of social relations, is needed for “the analysis of social inequality in general and gender inequality in particular.” The framework is helpful for analyzing the issues raised by my informants in Section 2.8.

¹⁶¹ Ibid., p. 104

¹⁶² Ibid.

2.7.1. Five aspects of social relations for the institutional analysis

March et al wrote that, based on Kabeer's concept, institutions are different in many ways depending on their cultures. However, they have five common dimensions of social relationships: rules, people, resources, activities and power. Analysing social differences and inequalities on the basis of these five aspects will help the researcher to understand the interrelationships of all relevant stakeholders within the study area and then be able to disclose who does what, who gains, who loses, how things are done, what is done and so on. The five are described in more detail as follows.¹⁶³

2.7.1.1. Rules: how things get done

Institutional behaviour is governed by rules. These may be official and written down. They may be unofficial and expressed through norms, values, laws, traditions, and customs. What rules do is to allow or constrain the following:

- What is done;
- How it is done;
- By whom it will be done;
- Who will benefit.

2.7.1.2. Activities: what is done?

Institutions do things; they try to achieve goals by following their own rules. These activities can be productive, distributive, or regulative. It is important to ask the following questions about activities:

- Who does what?
- Who get what?
- Who can claim what?

Institutions' rules ensure that there is a reutilized pattern of practice for carrying out tasks. As a consequence, certain tasks get attached to certain social groups, so that it seems that these groups are only capable of doing that particular task.

2.7.1.3. Resources: what is used, what is produced?

Institutions also mobilize and distribute resources. These may be:

- human resources (for example, labour, education, and skills);
- material resources (food, assets, land, or money);

- Intangible resources (information, political, clout, goodwill, or contacts).

2.7.1.4. People: who is in, who is out, and who does what?

Institutions deal with people and are selective about:

- who they allow in and whom they exclude;
- who is assigned various resources, tasks, and responsibilities;
- who is positioned where in the hierarchy.

This selection reflects class, gender, and other social inequalities. For example, in households it will be found that those specific households allow specific people in - perhaps one is not meant to marry across class, race, or ethnic dividing lines. The market also excludes and includes specific categories of people. High-powered jobs are normally held by people who are close to high-powered politicians, middle- or upper-class men.

2.7.1.5. Power: who decides, and whose interests are served?

The administration is made up of Tambon or sub district committees and at the village level the head person, normally make leads and makes decisions together with other committee leaders for example teachers and in the Northeast where the research was undertaken the Buddhist religious leaders play an important role.

Institutions such as the local government, village committees, school and temple embody relations of authority and control. Few institutions are egalitarian, even if they profess to be so. The unequal distribution of resources and responsibilities, together with the official and unofficial rules which promote and legitimize this distribution, ensures that some institutional actors have authority and control over others. These individuals then promote practices that entrench their privileged position, and they are most likely to resist change.

Kabeer also argues that, quoted by March et al, we have to go further into the “official ideology of bureaucratic neutrality” and “scrutinize the actual rules and practices of institutions to uncover their core values and assumptions”, in order to

¹⁶³ Ibid., p. 106

comprehend the social difference and inequalities of people across different institutions.¹⁶⁴

In summary, the Social Relationships approach will help the researcher to understand the extent of the existing cross-cutting inequalities between stakeholders generated by the relevant institutions in the study area and then be able to envisage possible and appropriate implications of particular approaches for policy and practice dealing with complex problems.

2.8. Engaging a diverse community

As stressed at the outset, the research for this thesis was undertaken in the Northeast of Thailand, that is predominantly Buddhist, but Thailand is characterized by very diverse people. As I write this thesis the South is ravaged by violence between the Muslim sections of the population who wish to secede from Thailand.

The population of Thailand has different beliefs, norms, religions, knowledge, social classes, and economic status but they have in common the desire for a sustainable future for their families. As I mentioned earlier in chapter 1, some parts of the nation's people can live in harmony but some do not by virtue of a variety of considerations. Nevertheless, it is not disagreed that everyone wants to see their own community develop or to have a high standard of living in a society that brings wealth and a good quality of life. These are public common or shared goals and conditions of Thailand's people, even if they have disagreements in some conditions and aspects of life.

However, to achieve the shared goals of a diverse people they should have a condition of shared ownership towards developing their community and country sustainably. People at different levels, especially in administrative positions, should be able to access and understand others' conditions, situations or ideas which could make them agree or disagree with each other. We need to "agree on some things and agree to disagree on other things, because a diversity is good to the extent that it does not undermine other people's democratic rights and responsibilities."¹⁶⁵ The development of social, economic, political and environmental national sustainability of the various people – men, women, old, young, poor, rich, Buddhists, Christians, Muslims, and others – requires them to be able to acquire shared goals and aims by working together

¹⁶⁴ Ibid., p. 105

¹⁶⁵ McIntyre-Mills, op cit.

and making decisions in which all are involved in the process of development which may affect their lives. Nobody should be left behind in the decision-making process.

Engaging the various people together successfully is necessary for sustainable development, with accountability and the taking of responsibility spread within communities across the nation. Stakeholders in public, private and community sectors should create, promote and strengthen elements essential to forming a network of partnerships at both institutional and individual levels. At the institutional level, these elements include interconnectedness, coordination, interdependence and interaction. At the individual level they include trust, self-confidence, friendships, credibility and other forms of social capital. Contributions to development can be undertaken by working together as a network of partnerships at the institutional and the individual levels by addressing shared strategies to enhance the management of diversity through “open, reflexive, respectful communication that is geared to rational outcomes, based on the assumption that the closest we can get to truth is through dialogue.”¹⁶⁶

In understanding the structural relationships of the stakeholders in order to distribute necessary resources, responsibilities and power to local institutions and people for their own development it could be useful to employ an integrated development approach combining multi-disciplinary knowledge. For this study, a “Social Relations Approach” will be used for analysing these structural relationships. This has been developed in the UK by Naila Kabeer at Sussex University’s Institute of Development Studies in collaboration with policy-makers, academics, and activists, primarily from the South (developing and underdeveloped countries).¹⁶⁷ It is claimed that social relationships determine “who we are, what our roles and responsibilities are, and what claims we can make; they determine our rights, and the control that we have over our own lives and those of others.”¹⁶⁸ People’s social relations and their positions in the structure and hierarchy of their society generate “cross-cutting inequalities”, including those of gender, class, ethnicity, and so on.¹⁶⁹ March, Smyth and Mukhopadhyay claim that the extent that tangible and intangible resources are

¹⁶⁶ Ibid, p. 381

¹⁶⁷ March, C., et al., op cit., p. 102

¹⁶⁸ Ibid., p. 103

¹⁶⁹ Ibid.

available or provided to people depend on their social relations. They also claim that¹⁷⁰:

poverty of people is a consequence of their 'unequal social relations, which dictate unequal relations to resources, claims, and responsibilities. (Simply put, people don't start at the same point in the social system, and as a consequence have very different capacities to take advantage of change or the status quo.)

2.8.1. Local community and its social relations and its affect on development in Thai rural areas

People become a core of all new development efforts paradigm and community where people live are more diverse and complex than before due to not only the success of science and technology development itself but of use that its benefits and potential as a critical tool for achieving developmental goals in economic, trading, education and environmental protection. For community development, the new technologies should also be seen as a powerful tool to establish multiple networks of support, ranging from individual level, such as friends and family members to institutional level, schools, temple, church, health care centre and local government agency for example, where families are socially supportive and related to social networks with other stakeholders within and outside the community in order to effectively providing human services, encouraging and supporting many forms of capital including social capital.

2.8.1.1. Strengthening various forms of capital essential for community development

A community in this complex world has to re-engage and work with other stakeholders at different levels outside the community and its neighbourhoods, which aimed at establishing a network of community resources (of both intangible and tangible assets). To do so, in parallel with working with others, the community itself and families should develop, getting cooperation with experts and professionals, their capabilities from within to deal with and be able to effectively reap existing locally value resources and possible benefits that come along with a various forms of

¹⁷⁰ Ibid.

intangible (information, knowledge, skills, cooperation, and so on) and tangible (funds and hardware, for example) assets. This means the community and all families within must take a serious concern and attention not only on achieving financial capital, but also on developing and enhancing other important forms of capital crucial to survive as a good community and nation as a whole – social capital, human and cultural capital and environmental capital. Families are the “key mediation point between individual and society, the private self and the public self as employee, voter or community group member.”¹⁷¹ Edgar claims that “the family, in whatever form, is the foundation for every child's human capital; it is the crucible of competence. It is also the starting point for every child's networks, its connections with the wider world, its sense of trust of and reciprocal obligations towards 'strangers' in the society as a whole.”¹⁷²

2.8.1.2. Developing a natural resource-based economy at community level

Because of the complexity of economic and social changes within a nation and across different regions and countries, no one, even a family and community, can survive without taking participations with others at local, national and international levels. To draw an analogy from Ilya Prigogine, a butterfly effect of any tiny changes of economic, social and environment of a society may cause some huge effects on other side of this world. For example, the 1997 Asian financial crisis caused by the mismanagement of some investors in Thailand had spread negative impacts not only on the development of economic sector, but also on the development of social and environmental sectors across the nation. The national crisis in Thailand affected many countries, from Asia continent such as South Korea and Indonesia to others, for instance, Brazil and Russia within few months. The global market, both of financial, trading and investment had been affected with the instability. Conversely, the global market so far has impacted small farmers in remote areas of Thailand. The economic crisis, therefore, has caused to profound effects in both negative and positive ways, of social and political areas across the nation. Sufficiency economy concept is becoming more important towards developing and strengthening the development at community level in Thailand. According to the Ninth National Economic and Social Development Plan (2002-2006), Sufficiency economy's philosophy is subscribed as the guiding

¹⁷¹ Edgar, op cit, p. 31

¹⁷² Ibid.

principle of the nation development.¹⁷³ The stabilization of a nation in economic, social and environment development requires communities within the nation to be self-sufficient and self-managed to some extent. Government does not provide financial resource for everything, community and local institutions, such as schools, local government, temple, church, commercial shops and local co-operations including farmers have to setup networks of community resources, which can access to other stakeholders and shareholders to learn entrepreneurial and self-management skills.

An agricultural country like Thailand which has a populace who lives mainly in rural areas depends on natural resources or agricultural products for their livelihood. It needs every relevant sector, the state, corporate/market/private and civil society/community to work together to increase their productivities in terms of both quality and quantity with the realization of next generations' benefits. Skilled workforce, regional economic, community infrastructure (transportation, markets, communication and so on), and employee lifestyle opportunity are prerequisites for attracting corporate sector to establish their business connections with the community.

2.8.1.3. Serving and servicing stakeholders – people and families

Family is the basic unit of society and every member of a family, especially children and the aged, should be supported economically, socially and culturally to grow up or live their lives with decent conditions. Families are themselves diverse; they live in very varied communities where both needs and resources differ. And services are most effective when they build social capital. Educational, health care services and other community services are basically and traditionally mutual responsibilities of the state and local governments. However, local people can participate in their policies and programmes directly or indirectly through their representatives. The state and local governments should act as partners, not sole service providers, to serve their citizens.

2.8.1.4. Building new networks of partnerships between corporate and community sectors

“The essence of postmodern society is complexity and diversity, where no lumbering, centrally controlled system can cope and...adaptability is the name of the

¹⁷³ NESDB (2001), *The Ninth National Economic and Social Development Plan B.E. 2544-2549 (A.D. 2002-2006)*, [Online, accessed 06 October 2004], <http://www.nesdb.go.th/plan/data/SumPlan9Eng/menu.html>

game.”¹⁷⁴ In the increasing complexity and diversity of society, nobody, neither the government, corporate nor community sectors, can manage the diverse and ever-changing needs of people, community and society, stresses Edgar. According to his research, everyone and social entities have to ‘reconnect’ and work together in order to achieving mutual goals of development. A nation should call for the interconnectedness, coordination, interaction and interdependence among social institutions at different levels including a various forms of social capital for individual level. Networks of partnerships inter-supported with the integration of joint-up government, the Third way and the Middle path or sufficiency economy could be practical and innovative ways for developing and strengthening a viable and flexible economy, particularly at community and family levels.

2.8.1.5. Building core capabilities for family and community

According to the Third Way argument developed by Giddens, community-based economy and social wellbeing could be achieved if the state and local governments reconceptualise their roles in community development by working together with business or corporate sector, civil society sector and voluntary sector in order to building and strengthening networks of partnerships to enhance a various forms of capital within family and community.¹⁷⁵ Core capabilities or the intangible dimensions of capacity are seen as crucial elements for capacity building because they decide how successful society and community use the other resources in an efficient, effective, relevant and sustainable way. The core capabilities, for example friendships, membership of networks, skills, experience of working in the public sphere, self-confidence and credibility, status and respect, leadership qualities and so on.

Families and communities are the crucibles of national competence and one important platform of national wellbeing creation. The state, therefore, should make a serious commitment on providing a community infrastructure facilities, such as road, water supply, electricity, information and communication equipments, etc., including promoting and creating awareness among policy makers at all levels of government, as well as among institutions which get involved in capacity building policies and development programmes.

¹⁷⁴ Ibid., p. 2

¹⁷⁵ Giddens, A. (1998), *The Third Way - The Renewal of Social Democracy*, Cambridge: Polity Press, p. 99-128

2.8.1.6. Initiating and facilitating a knowledge-based community for local development

Within the new development paradigm dealing with the complexity and social changes all the time, all relevant stakeholders, particularly the state and local governments, should realize the need and importance of new technologies and research within the context of knowledge-based approach towards the roles of information and knowledge for community development. The capabilities of people and local institutions, fostered by coordinating with stakeholders who are expert in this area, in developing and utilizing existing community-based resources (both tangible and intangible) and harvesting the ones from outsides, will ensure to setup the foundation of the natural resource-based economy and to meet sustainable development's goals. That means practical and affordable solutions could be the outcomes of the process of research combined with community ideas plus feasibility studies based on the needs of families and communities.

In my thesis, resources can be categorized into two different groups: intangible and tangible resources. Both are seen as indispensable combinations for modern community development efforts focused on supporting and enhancing human development, for example strengthening the capabilities of people and community to help themselves (in ways related to planning, designing and executing, monitoring and evaluating the development programmes) and to prepare to participate in many more ways of development than before, rather than the development itself.

2.8.1.7. Intangible resources

Intangible resources refer to human and cultural capital and variety forms of social capital which are essential for networks within family and community.

2.8.1.8. Tangible resources

On the other hand, tangible resources, for example, school, church, temple, local libraries, health care centre and local shops, are some forms of important assets of community, should be designated as centres of community services and of a network of family resources.

Various community members, children, the aged, the disabled, men and women are the central of community development. They have had rights and committed their responsibilities to conveying and achieving decent lives. Nobody is left behind in the

decision-making process. They, as community members, work together with members of the networks of partnerships.

The state and local governments are partners to support and promote community resourcing and provide family and community essential public services, for instance of education and health care. A network of community resources takes control over the distribution of natural resources and responsibilities.

2.8.2. Buddhist temple, its social relations and its relevance for the development in Thai rural areas

A religious organization is an important social and culture entity at community and civic society sector. Over many decades, under the national constitutions, people have their own rights to belief and practice any kinds of social codes of conduct or any religious with taking responsibilities to other people rights. Culture, belief, norms, customs, and people's world view form national identity of the state or human identity of people who live together within a certain area, whatever confined by time or space, especially in Thailand. They are inextricable links or parts of the nationality. People call or see themselves as civilized because they partly own those identities and are capable to improve, develop and advance the existing ones and create and recreate new and better ways of life.

Buddhists are a majority of 95% of the nation population. Approximately 5% are shared by Muslim (3.8%), Christians (0.5%), Hinduism (0.1%), and other religions (0.6%). The study areas are found that there are no any churches and mosques there. However, it is only a church in this province located at the inner city of Udorn thani.

2.8.2.1. Building and maintaining codes of morality or social ethics

A temple (*wat* in Thai) has two meanings. First, temple means a place in where a priest lives and does religious activities together with people. Second, it means a benchmark which allows people to measure and compare the extent of their skills or capital, especially social capital, by learning by doing and by working together or communicating with other people within and outside community.

For its first meaning, a temple as a local community institution is a religious place attaining obligations to guide goals and provide benefits to four levels of people and creatures, namely, individual or oneself, others, society and environments or the natures. Codes of morality are necessary for priests and laity alike. Morality is

therefore regarded as essential for daily life. Priests, especially in Thailand, live their lives depending on laity and other people in the society. One of their ultimate goals, therefore, is to improve their knowledge and wisdom in order to work effectively together with people and not being isolated from, others to achieve individual and social goals of all. Priesthood is not only a model of helping and living with others and developing and educating oneself from achieving ordinary goals and benefits to ultimate ones, but also a benchmark of humanity and of maintaining codes of morality and respect for all living things. This is the second sense of temple or *wat* which is aimed at developing and promoting capacity of people.

2.8.2.2. Capacity Building centre

A temple is the centre of the community for diverse people, rich and poor, women and men, children and adults, professionals and less educated and so on, to work together as fraternity without any concerns of difference in class, beliefs, social status, ethnic groups, gender and etc.; which mutually aims to achieve sustainable development in amidst of social changes at local and world communities. From this perspective, temple can be a community centre and can work together with other local institutions, for example, schools, local government, business groups and other civil societies towards enhancing necessary skills, especially civic or social entrepreneurship. Achieving the social entrepreneurial skills of local people, women and men, children and adults, young and old, can ensure that the entrepreneurs acquire important skills to analyse, envision, communicate, empathize, enthuse, advocate, mediate, enable and empower a wide range of diverse individuals and organizations. Social entrepreneurs are able to effectively and efficiently utilize scarce resources, especially of tangible dimension of capacity.

2.8.2.3. A centre of social network of partnership

In the past, before the modernization of Thailand under capitalism, the Buddhist monastery was the centre of village life and Buddhist monks were its cultural leaders. The Buddhist *sangha* (community of monks) provided villagers not only codes of morality, culture, and ritual, but also education, medical care, and occupational advice. In such a community, the spirit of sharing and cooperation prevailed; local people shared a common local Buddhist culture. However, this Thai rural social structure, with the Buddhist *sangha* at its centre, collapsed under the impact of

economic dependence, social dislocation, and cultural transformation.¹⁷⁶ All development projects undertaken by the central government under the concept of consumerism providing tangible assets and creating new values for consumer goods only to villagers and rural institutions mainly led to new undesired circumstances for local people. The increasing number of young women from rural areas in sex industry had been arisen dramatically. Meanwhile, most of young men were pushed into the industrial sector with a lower income due to the lack of working skills. Within decades, these negative circumstances gave the highest lessons to many people, especially local people and villagers, realized that flourishing community characteristics, for example forms of social capital, have faded away from the community life and their lives were torn apart by the development approach which heavily and solely focused on economic development. Social cohesion could not be transferred by any top-down development programmes of the central government.

At the present, their realization includes that the task of rebuilding a healthier rural society does not belong to a group of people or an organization, but all Thais both at individual and institutional level. All local institutions, especially school and temple, have revitalized themselves from within by taking seriously cooperation with other stakeholders to strengthen the community life together. A temple becomes a community centre of partnership by virtue of its principles, towards pluralism and tolerance, is the middle way allowed diverse people interact and work together creatively and effectively.¹⁷⁷ There are many Buddhist base communities in rural areas, Thailand, cooperate with relevant stakeholders including international community representatives such as NGOs in seeking to promote self-sufficiency economy as well as to increase self-respect and self-confidence for rural communities.

Capability, skills, human goodness and other forms of human capital can not simply transferred from generations to generations by just like moving water from a glass to others. Education, inculcation and training may be one of intelligent human mechanisms or instruments to mold people in specific ways of living and thinking. By the virtue of the limitations of time and space of humanity (due to their inability to fly by themselves and to live longer than two hundred years), social institutions, for

¹⁷⁶ Puntarigivat, T. (1998). *Toward a Buddhist Social Ethics: The case of Thailand*, Cross Currents. 2005.

¹⁷⁷ See more details of Buddhism and pluralism in Satha-anand, S. (2004), 'Buddhist Pluralism and Religious Tolerance in Democratizing Thailand', *APPEND*, vol. 4, no. 11, pp. 193-231

example in the fields of education, politics, and economics, are their representatives or heritages to collect and transfer their skills, knowledge and intelligence from generation to next generations. Each tribe or group of people as a community or nation carry their own norms, values, beliefs and skills to build up their family, tribe, group and nation. In Thai community, family obtains loving-kindness, caring and other forms of parenting skills and being a good couple to bring up life of family and its members. School is the second social institution following a family to create, implant, educate, and enhance academic skills and necessary livelihood skills for children and people for living and working with others. Meanwhile, the temple plays a major role in inculcating and training people and social skills to understand themselves and others in order to living and working together in a friendly and peaceful way. Currently, some activities under the cooperation of school, temple, local government and voluntary groups exist across the nation. There are:

2.8.2.4. Social ethic training programme

Social ethic training programme aims to promote and strengthen social capital especially codes of morality, working together skills, self-discipline, solidarity, non-violent practices of students from schools, colleges, and university; academic people; officers and workers at state and corporate sectors as well as general people. Such Buddhist base programmes are implemented nationwide and go hand in hand with other stakeholders both in urban and rural areas, for instance, *Suan Mok*, the forest temple of Buddhadasa Bikkhu at Suratthani province; *Wat Na Luang* of Luang Phor Thong Bai in Udonthani's mountain including *Wat Cholaprathan* of Panyanantha Bikkhu located on the northern outskirts of Bangkok. Especially, Buddhadasa's idea of pluralism and tolerance concepts towards the diversity of people, beliefs and religions; which emphasizes that other religious beliefs or masters are "opponents", but not "enemies".¹⁷⁸ Also that dialogue is important for those diverse people to share information and knowledge to gain more mutual understanding about others' needs and problems. This positive attitude is evidenced that Thai community fundamental principle is pragmatism which "agrees on some things and agree to disagree on other things" and is an essential factor to live and work together with the diverse and over-changing society and people.

¹⁷⁸ Ibid., p. 204

2.8.2.5. Civil entrepreneurship community projects

In the face of the unpredictable forces of globalization and consumerism, all stakeholders should coordinate with networks of partnerships to revitalize community, particular in rural areas, in supporting them retain a level of self-sufficiency, self-respect, self-confidence and independence because of only the state government can not be available to serve and provide every thing to them. As temple is a local institution, what it can do to serve its community and people is what I called “Civil entrepreneurship community” with well-educated community leaders and being in partnership with local people and others shareholders. The objectives of the civil entrepreneurship community project are to develop, promote and enhance civil or social entrepreneurial skills analysing, envisioning, communication, empathizing, and empowerment and so on. Social entrepreneurial skills are essential for local people and relevant stakeholders, particularly in rural areas to achieve the goals of self-efficiency economy¹⁷⁹, to be able to effectively and efficiently utilize scarce resources, both of tangible and intangible dimensions of capacity, with taking account of social, economic and environment concerns.

There are a number of initiatives in civil entrepreneurship projects, based on Buddhism and non-Buddhism concepts or practices, for example, Phra Khamkhan Suvanno's community at Tahmafaiwan in northeastern, Phrakhru Sakorn's community at Yokkrabat in central, and Buddha-Kasetra community in northern.¹⁸⁰ Civil entrepreneurship projects can provide networks of partnerships for society. By gaining the supports from the networks and the establishment of economic self-sufficient, self-confidence and political decentralization, rural communities could solve their own problems in an effectively and sustainable ways.

Human resources or people are essential resources for all modern development approaches. Goals of human development resources, whether in the state or corporate sector, are aimed at to develop and enhance human capital and social capital. Labour, education, and skills are necessary for achievement in our careers. The state and corporate or market sectors cannot be strong and flourished without social stability

¹⁷⁹ The goals of self-sufficiency economy are mainly to create and enhance “ a strong and balanced society” to ensure that the people are able to maintain balance and be ready to cope with rapid physical, social, environmental, and cultural changes from the outside world. More details see NESDB (2001), p. 4.

¹⁸⁰ More details see Puntarigivat, op cit.

concerns. Higher social stability is driven by the higher progress of human and social capital of people in a nation.

Temples in Thailand have played a major role to support and strengthen human and social capital, especially social ethics for living and working together creatively and peacefully. Well educated people may be high demand for the government and market sectors to accomplish their objectives, but humaneness and well educated people are more needed for social stability and solidarity. In this sense, therefore, temple and other local institutions are community resources at community level in producing other essential resources, human resources. The future of various communities such as in villages, of cooperation or businesses and across nationwide heavily relies on those qualified people, if they are to flourish.

Monks are not solely responsible for their religious institutions. The institution cannot exist if it cannot support and serve people's needs and work together. They are interdependent and interrelated. Dealing with diverse people from other sectors (state, corporate and civil society), and different backgrounds – poor and rich, young and old, children and adult, disability and informative, rural and urban people, ordinary and well-educated, lay people and experts, and so on, and, moreover, without taking any serious responsibilities to live with their own families or lives, monks in a temple are therefore supposed to be more knowledgeable, comprehending, intellectual and wise, in order to participate effectively and well with diverse people, in an over-changing society, with different needs and specific problems.

Theoretically and practically, human resources are crucial as national resources at different levels – national, organizational, community, family and individual. The ability and responsibility to successfully and sustainably inculcate and educate all people by providing and distributing intangible resources such as knowledge (indigenous and non-indigenous, general and technical, for example) and information (within community or outside, norms, tradition and so on), or in other words multi-disciplinary knowledge, requires the networks of diverse stakeholders with different ideas and approaches, not only religious ones. The interdependence and interaction among knowledge and the distribution of knowledge and the networks of partnerships (to distribute knowledge and information) can ensure that local people and community can obtain self-efficacy, self-confidence and self-respect to help them and others much better. And in turn, those social institutions, local community and family can be well

established, strengthened and stronger to perpetually carry a decent life and welfare for the society members.

2.8.3. School and its social relations and its affect on development in Thai rural areas

There are four important local institutions, for analytical purposes of this study, namely, school, local community, religious and local government organizations. This section will present the underlying causes of social differences and “cross-cutting inequalities” of the local schools in certain ways in relation to the five common dimensions of the Social Relationships approach: roles, responsibilities, claims, and power.

Rules for school can be divided into two categories: Official and unofficial rules. Official rules can be written down, such as for learners or students, teachers and other stakeholders, aimed to establish institutional guidance and behaviour. Official rules of schools are to provide and enable students or learners to succeed to the best of their ability in the Thailand curriculum, for example, to promote and support students to meet basic learning needs which basically comprise “both essential learning tools (such as literacy, oral expression, numeracy, and problem solving) and the basic learning content (such as knowledge, skills, values, and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning.”¹⁸¹ Our goals in education are also to foster individual fulfillment, to strengthen our institutions, and to develop educated and trained manpower for changing society.

In terms of working together with other beneficiaries in a community, another main official rules should include effectively engaging families, communities, businesses, and other stakeholders to enhance students’ basic learning needs.

For unofficial rules which may not be written down, teachers may have a range of rules which help and allow students being learned and be able to live and work together with other people who are members of a family, community both locally,

¹⁸¹ UNESCO (1990), 'World declaration on education for all and framework for action to meet basic learning needs', *World Conference on Education for All - Meeting Basic Learning Needs*, Jomtien, Thailand, UNESCO, [Online, accessed February 23, 2005], <http://www.unesco.org>

nationally and internationally, and who may be different in norms, values, traditions, and customs.

According to World Declaration on Education for All¹⁸², essential educational activities, which can carry out school's tasks to achieve basic learning needs of students and learners, should include (to extract from and paraphrase the report): 1) Universalizing access and promoting equity, 2) Focusing on learning, 3) Broadening the means and scope of basic education, 4) Enhancing the environment for learning and 5) Strengthening partnership.

Those essential basic activities can be described in more detail as following:

2.8.3.1. Universalizing access and promoting equity

i) All children, youth and adults should be capable of accessing to basic education.

ii) For basic education to be equitable, they must be given opportunities to further develop and maintain their quality of learning.

iii) The most urgent priority is to ensure access to, and improve the quality of, education for girls and women, and to remove every obstacle that hampers their active participation. All gender stereotyping in education should be eliminated.

iv) An active commitment must be made to removing educational disparities. Underserved groups: the poor; street and working children; rural and remote populations; nomads and migrant workers; indigenous peoples; ethnic, racial, and linguistic minorities; refugees; those displaced by war; and people under occupation, should not suffer any discrimination in access to learning opportunities.

v) The basic learning needs of the disabled demand special attention. Steps need to be taken to provide equal access to education to every category of disabled persons as an integral part of the education system.

2.8.3.2. Focusing on learning

The focus of basic education must be on actual learning acquisition and outcome, rather than exclusively upon enrolment, continued participation in organized programmes and completion of certification requirements. Active and participatory approaches are particularly valuable in assuring learning acquisition and allowing learners to reach their fullest potential. It is, therefore, necessary to define acceptable

¹⁸² Ibid., pp. 4-7

levels of learning acquisition for educational programmes and to improve and apply systems of assessing learning achievement.

2.8.3.3. Broadening the means and scope of basic education

The means of scope of basic learning needs of students, learners, children, youth and adults should be broaden and perpetually redefined to encompass the following components:

i) Learning begins at birth. This calls for early childhood care and initial education. These can be provided through arrangements involving families, communities, or institutional programme, as appropriate.

ii) Primary schooling is the main delivery system for the education of children outside the family. Primary education must be universal, ensure that the basic learning needs of students, learners, children, youth and adults are satisfied and take into account the culture, needs and opportunities of the community. Supplementary alternative programmes can help meet the basic learning needs of children with limited or no access to formal schooling, provided that they share the same standards of learning applied to schools, and are adequately supported.

iii) The basic learning needs of all learners are diverse and should be met through a variety of delivery systems. Literacy programme are indispensable because literacy is a necessary skill in itself and the foundation of other life skills. Literacy in the mother-tongue strengthens cultural identity and heritage. Other needs can be provided by: skills training, apprenticeships and formal and informal education programmes in health, nutrition, agricultural techniques, population, the environment, science, technology, family life and other societal issues such as cultures, norms, living with others, ethics and so on.

iv) All available instruments and channels of information, communications and social action could be used to help convey essential knowledge and inform and educate people on social issues. In addition to traditional means, radio, television, libraries and other media can be mobilized to realize their potential towards meeting the basic learning needs of all learners.

An integrated system should be created by taking all these components into account in manners of they are interrelated, reinforced each other and of comparable standards. And then they should contribute to producing, developing and promoting possibilities for lifelong learning.

2.8.3.4. Enhancing the environment for learning

Learning does not take place in isolation. Societies, hence, must ensure that all learners attain the nutrition, health care and general physical and emotional support they need in order to participate actively in and benefit from their education. The education of children and their parents and other caretakers is mutually supportive and this interaction should be used to create a learning environment of vibrancy and warmth, for all.

2.8.3.5. Strengthening partnerships

The task of providing the basic learning needs for all can not be an exclusively and unique responsibility of educational administrative at national, regional and local educational levels. These educational administrative can not fully provide human, financial and organizational supports and requirements for the task. Partnerships from relevant stakeholders at different levels are required. These following forms of partnerships are necessary to work together with the state educational administrative to contribute to the planning, implementing, managing and evaluating the basic education programmes. They are:

- i) partnerships among all sub-sectors and forms of education, recognizing the role of teachers and that of administrators and other educational personnel;
- ii) partnerships between education and other government departments, including planning, finance, labour, communications, and other social sectors;
- iii) partnerships between government and non-governmental organizations, the corporate or private sector, local communities, religious groups and the household or family sector.

Partnerships are a vital obligation of relevant stakeholders to support and broaden the education programmes for all.

The fundamental requirements needed to carry out the basic learning needs for all should encompass: 1) developing a supportive policy context and 2) Mobilizing existing and new resources from multi-sectors.

2.8.3.6. Developing a supportive policy context

Supportive policy in the social, cultural and economic sectors should be required in order to realize the full provision and utilization of basic education for individual and social improvements. Policy commitment and political should be made

to ensure that well-suited financial and human resources and educational policy reform will be sufficient to support the basic learning needs. In addition, appropriate policies pertaining to the developments of economic, labour, employment and health service can enhance learners' incentives and contributions to the social development.

Moreover, societies should also insure a strong the environment of intellectual and scientific knowledge for basic education. Close contact with contemporary technological and scientific knowledge should be accessible by all levels of education.

2.8.3.7. Mobilizing and pooling existing and new resources

If the basic learning needs of all are to be met through a much broad scope of action more than in the past, it is crucial to mobilize and pool existing and new resources, such as human and financial resources, state, corporate, civil society and voluntary. Time, energy and funding contributed to basic education by all of society may be the most important investment in people and in the future of a country.

Serious attention to improving the efficiency of existing educational resources and programmes will not only produce more, but it can also be expected to attract new resources. The quality and delivery of basic education can be enhanced through the use of suitable and new technologies, as emerging educational resources. The use of modern technologies (educational radio and television, computers and various audio-visual instructional devices) can also improve the management of educational for all.

Moreover, another two converging powerful resources are emerging: 1) the exponential rising of quantity of information available in the world and 2) the integration of such important information and the potential advantages of new technologies, particularly the new capacity of communication, being available and accessible for most of people around the world. Education must be seen as a fundamental dimension of social, cultural and economic design and the existing of new resources can be perceived as new opportunity to harness their potential positively, consciously and with design, in order to contribute to meeting defined learning needs.

If education is essential for all and the future of a country, all people and institutions at different levels should have a contribution to establish a network of partnerships to ensure that their resources, activities and roles can promote and enhance the learning environments for every one in societies due to education is an important asset and treasure within. Meeting the basic learning needs establishes a

common and universal human responsibility. It requires national and international solidarity and equitable and fair economic relations in order to redress existing economic disparities. All local and world communities have valuable knowledge and experiences to share for designing effective educational policies and programmes.

All people, their representative in educational institutions, professionals and experts in educational and learning spheres have to get involved in decision-making processes. Nobody should be left behind and everyone should have equal opportunities to access and facilitate the national educational resources and then, in turn, they can participate and exercise their authority, responsibility and control over the resources.

2.8.4. Local government and its social relations and its affect on development in Thai rural areas

Geographically, local government in Thailand is organized in 6 different forms; equally distributed among urban and rural areas. Three rural-based forms of local government take place at provincial, district and sub-district (or *tambon*) levels, which include:¹⁸³

- The Provincial Administrative Organization (PAO) that constituting local government at a provincial level;
- The *Sukhapiban* or Sanitary Committee, a local government in a rural centre, often referred to as a sanitary district takes place at district level; and
- The Tambon Administrative Organization (TAO) constituting local government at a sub-district or *tambon* level.

Tambon Administrative Organizations (TAOs) at tambon level are only the case studies as local government department of the area of study. By 1997 there were 2,761 TAOs throughout the country. The organization also takes the council-executive form of government. Members of a *tambon* council are partly elected by voters and partly appointed by the provincial governor. The chief executive of the organization is the *kamnan* (a chief of sub-district of *tambon*) who is appointed by the governor. The area of jurisdiction of a Tambon Administrative Organization overlaps with that of the provincial administrative organization (PAO) since a *tambon* is a smaller division of a

¹⁸³ UNESCAP (2004a), 'Local Government in Asia and the Pacific: A Comparative Study, Country paper: Thailand', [Online, accessed August 30, 2004] <http://www.unescap.org/huset/lgstudy/country/thailand/thai.html>

district and the district is a smaller division of a province. The districts and subdistricts are the administrative areas under the jurisdiction of PAO.

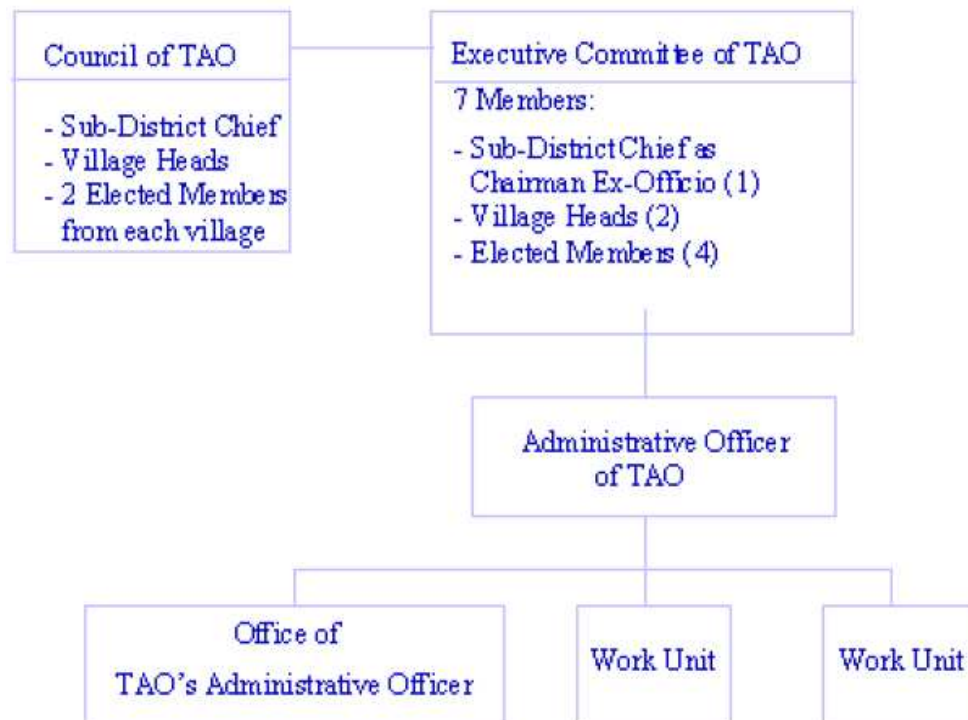


Figure 2.5: Tambon Administrative Organization (TAO)

In the era of globalization and the complexity society, people are more demanding for high achievements socially and individually. The central government cannot solely effectively and efficiently deliver and provide public services to all by applying the top-down actions both administrating, managing and planning due to the diversity of society. A Tambon Administrative Organization should be seen as local institutions where local people and government officers able to work together closely, in many aspects of development arenas – social, economic and environment protection, in order to meet their needs more effective than the central government. A Tambon Administrative Organization is supposed to better participate with other stakeholders within and outside its region in the delivery of public services such as education, trading, public health, legal supports, etc.

Rules or methods of that local government to be successful in the deliver of services to meet people’s needs are comprised of official, such as laws and policies, and unofficial, norms, traditions and customs.

According to the current policy of Tambon Administrative Organizations, their official rules pertaining to community development are:¹⁸⁴

- Management by objectives is based on principles mainly focused on the current needs and problems of the people
- People involved as public participation of people is the central of tambon development planning
- Tambon Administrative Organization is a local mechanism to coordinate with government agencies and other organizations across different levels and sectors
- Tambon Administrative Organization is a model of decentralized government departments to distribute their authority and responsibility to local community to work together with government agencies and other organizations across different levels and sectors.

According to the above reference, local government at tambon level tries to achieve its goals by establishing the following basic development activities:

- Development planning

Development planning is the local government process which aims to identify and make a decision pertaining to answer what, where, when, how and by whom development projects will be carried in order to achieve its goals.

- Economic development

Increasing the productivity of local area and people income is an important target of economic development project running by TAO.

- Social development

Its goal is to improve the quality of people lives covering developments across local institutions such as education and religious organizations, health care centre and security offices (police and fire brigade stations).

- Political development

To improve and strengthen participation of people in politics and enhance social democratic politics are prime political development by local government across its community.

¹⁸⁴ This document called “Tambon development plan 2547” provided by the Tambon Administrative Organization of Nam Pun, Nong Wua Saw, Udorn thani, Thailand.

- Managerial development

Applying good governance concept into the Tambon Administration Organization practices is an essential effort to better improve the delivery of public services and its administrative processes. However, in reality, the above basic development activities are far from being fully achieved by virtue of inabilities of working in partnership among other local institutions such as the village, school, religious institution including an organization from corporate and voluntary sectors. In addition, most TAOs at community level have had very few some information, knowledge and skills, entrepreneurial skills for example, to undertake the integrated development approach processes effectively or to reach the development goals sustainably.

The necessary resources needed to be mobilized and distributed by the TAO in providing public services to local people and other institutions and working in partnership comprise human resources and material ones (assets, land and budget) as well as intangible ones (information of local tangible assets, government regulations, etc. and contacts with other stakeholders).

In principle, local government is the basic unit of a democratic political system which is important as people are important resources. At the level of local government people participate in the political system through the election of the executive and the legislative branches of government. However, in reality, limitations in public participation of local people in most local government development processes, whether in social, economic and, particularly in political area, are minimal. According to the report on Human Settlements of UNESCAP, there are two major factors why direct participation of local people, including other local institutions, in local government has been minimal.¹⁸⁵ First, people are not provided any legal means by legislation to directly participate in the local government affairs. For instance, in case of conflicts between the local government and the central government still depends on the ‘judgement of the Department of Local Administration’ in Bangkok. This implies that, practically, the full decentralization of governance in the public administration system may partly exist on the national constitutions.

¹⁸⁵ UNESCAP (2004a), op. cit.

Second, the general public has little knowledge about local government. Educational institutions at both secondary and higher levels in the country barely educate students, except for those studying political science, about the structure and the functioning of local government. A small number of people, therefore, know about the functioning, the problems and the general affairs of local government. Moreover, most information pertaining to political affairs reported by any channels of communications – radios and televisions – is mainly focus on those of the central government located in the nation capital. Characteristically and practically, most local people, except for those who have their own interests in local political activities, are automatically excluded from the local administration systems.

The relations of authority and control in available local resources and responsibilities distribution are a typology of power exercises. Obtaining little knowledge about local government affairs of local people, even of those who called themselves as educated from higher educational institutions, may lead to lacking of power and opportunity to participate in controlling and making decision processes on key public issues affected their communities and futures. The power in managing and contributing resources, both tangible and intangible, including improving the quality of public service delivery, should go in hands of all people and community beneficiaries, rather of some institutional actors. The people must realize that local government can be able to assist them to meet their needs more effectively than the central government due to “hierarchy is viewed with suspicion, as are traditional symbols and trappings of power.”¹⁸⁶

¹⁸⁶ Giddens, A. (2000), *The Third Way and its Critics*, Polity Press, Cambridge, p. 42

CHAPTER 3

RESEARCH METHODOLOGY AND DESIGN

3.1. Research Methodology

The research used a combination of two research methods, namely interviews and participant observation. The methodology is broadly constructivist grounded theory¹⁸⁷, in order to include qualitative perceptions and to draw on the quantitative data which provides the context for the analysis. In most instances, the informants' words are quoted directly, so that they speak for themselves. But the research data collection was guided by the following questions derived from:

- my experience living , studying in the local school and working most of my life in the case study context of the Thai rural community,
- the literature,
- discussion amongst supervisors, colleagues and
- the informants who made suggestions prior to the research.

As a result my *emic* or insider perceptions alongside the emic insider perceptions of my informants with whom I have been closely associated with all my life shape and influence the *etic* analysis brought through the learning from this research.¹⁸⁸ This is why my research is grounded in a constructivist way. I am doing an analysis that draws on my life and experiences and it is informed by the life and experiences of my informants. The use of extensive transcripts is essential for grounding the theory. Chapter 4 and 5 voice the ideas of the informants in their own words, whereas chapter 6 develops grounded theory from those ideas based on my interpretation analysis of their emic or insider perceptions.

¹⁸⁷ Charmaz, K. (2000). Grounded Theory: Objectivist and Constructivist Methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed., pp. 509-536). London: Sage.

¹⁸⁸ Emic and etic were coined by Kenneth Pike. Emic means “expressing the views, concepts, categories and values of insiders”. Meanwhile, etic is “expressing the views, concepts, categories and values of outsiders”. Cited in Chambers, R. (1997), *Whose reality counts? Putting the first last*, London, ITDG (Intermediate Technology Development Group), pp. xiv-xvi, and Pelto, P. J. (1970). *Anthropological Research: The Structure of Inquiry*. New York: Harper & Row, p.68

The thesis addresses the following research questions used to engage the local key informants:

1. What is your/ your organization current use of ICTs?
2. What is your/ your organization past use of ICTs?
3. What information/Communication needs do you have?
4. What information/Communication needs does your organization have?
5. What information/Communication needs do you have to improve your ability to contribute to development?
6. What information/Communication needs does the community have to improve its ability to contribute to development?
7. What information/services could be provided to you through ICTs?
8. What information/services could be provided to your community through ICTs?
9. What value would further provision of ICT/access provide?
10. Are you aware of other parts of the community who have access to/use ICTs?
11. What value would there be if you could use those facilities or cooperate with those people? (Not at all, Very low, low, high, and very high)
12. Are you aware of the government policies and investment in ICT for developments? What is it? What is its purpose? Do you/could you use it? And what benefit?

[Before asking the questions 13-18, the interviewer will explain in more detail with the informant about several ICTs potential ways of contribution to development in following areas:

- Economic (prices of agricultural inputs -such as seeds, fertilizers, pesticides-, and outputs -rice, vegetables, sugarcane) and business (market outlook- new opportunity and business expanding in an existing and new market)

- Social (broadening access to information and having equal opportunities to contribute to, and incorporate/participate in the development process including to mobilize resources to solve problems of common interest) and human capacity (e-learning, e-education, e-business and so on can benefit to increase and enlarge people capability and help strengthen the development process in return). It will also help in improving political accountability and transparency and supporting the government activities to be more open to public to reinforce both political and administrative accountability including building and sustaining socio-political connections, coordination and interaction amongst a variety group of people at all levels -public, corporate and civil society and voluntary group.]

13. How important/beneficial could this be to your organization?

14. How important/beneficial could this be to your community?

15. What would you/your members need to be able to use ICTs/services effectively? (Access, hardware, expertise or intermediary)

16. What value/what opportunity is there for you to work together with other parts of the community to contribute to capacity development?

17. Can you name any groups/organizations/business/individuals that might be valuable in this respect?

18. What about school/temple/local government etc. which might be valuable in this respect?

3.1.1. Constructivist Grounded theory

The qualitative approach is based on a version of grounded theory, a style of doing qualitative research that uses an inductive process. Strauss and Corbin claimed that:

Grounded theory is derived from data, systematically gathered and analyzed through the research process. In this method, data collection, analysis, and eventual theory stand in close relationship to one another. A researcher does not begin a project with a preconceived theory in mind (unless his or her purpose is to elaborate and extend existing theory). Rather, the researcher begins with an area of study and allows the theory to emerge from the data. Grounded theories, because they are drawn from

data, are likely to offer insight, enhance understanding, and provide a meaningful guide to action.¹⁸⁹

I acknowledge that I am part of the study, because I am part of the community and I draw on my own experiences. Grounded theory's main aim is the "generation of theory from the data, although existing theories can be modified or extended through this approach."¹⁹⁰ A grounded theory approach does not involve testing a hypothesis but is an 'emergent' approach. A researcher's task is to understand what is happening within the research situation and how the researcher manages his/her roles.¹⁹¹

A number of the basic elements of grounded theory will be applied for conducting the research. These comprise:

3.1.1.1. Maintaining a balance between sensitivity and objectivity

Within grounded theory methodology there are interchanging patterns between data gathering and analysis. I do not think that "analysis begins with the first interview and observation, which leads to the next interview or observation, followed by more analysis, more interviews or fieldwork, and so on".¹⁹² , because my research questions were formulated as a result of my experiences living and learning in Thailand's rural and remote villages. The process of research requires a balance between sensitivity and objectivity when a researcher immerses himself or herself in the data. Making the discovery of emerging ideas or concepts needs constant interplay between sensitivity and objectivity (or the research and the research act). Sensitivity provides the researcher meanings in the data and connections between emerging concepts, while objectivity provides confidence that his or her research results are a reasonable, impartial and accurate representation of events. Enabling happens when a researcher has theoretical sensitivity, he or she "develops insight and awareness of relevant and significant ideas while collecting and analyzing the data".¹⁹³ When a researcher manages the data along with theoretical sensitivity, he or

¹⁸⁹ Strauss, A. & J. Corbin (1998), *Basics of Qualitative Research*, Thousand Oaks, SAGE Publications, p. 12

¹⁹⁰ Holloway, I. (1997), *Grounded Theory: Basic Concepts for Qualitative Research*, Oxford, Blackwell Science, pp. 80-86

¹⁹¹ Dick, B. (2000), *Grounded theory: a thumbnail sketch*, [Online, accessed 3 June 2002], http://www.uq.net.au/action_research/arp/grounde.html

¹⁹² Strauss, A. & J. Corbin, op cit., p. 42

¹⁹³ Holloway, op cit.

she will think about emerging ideas, keep asking more questions and notice those ideas as dynamic until saturation is reached. The research questions have been formed to guide data collection and analysis in ways that focus on the understanding, perception and awareness of participants regarding ICTs' roles and benefits for economic, social, and communication needs of their community development as well as for capacity building in both institutional and personal areas. The researcher will be sensitized by relevant, significant and emergent ideas especially pertaining to the potential roles ICT could play in balanced development (as was described above as the research subject matter).

3.1.1.2. Theoretical sampling

This kind of sampling is unlike sampling which is planned in advance. Theoretical sampling happens throughout the inquiry process. In grounded theory, theoretical sampling is “a successive sampling of data guided by the theoretical trends emerging from the analysis,” which leads the process.¹⁹⁴ As an initial sample is interviewed and themes and key variables emerge from the data, the researcher then identifies emergent axial or central themes. And then the next cycle of sampling process will be made, in order to build up an emerging theory by specifying the properties of the categories and their relationship of category to category.¹⁹⁵

3.1.2. Case studies

Case study research, according to Sarantakos who quotes Kromrey's assertion, refers to a study of individual cases in their real-life situations over a period of time and applies a number of data collection and analysis methods.¹⁹⁶ This study's methodology employs grounded theory in case studies: to acquire more information about the structure, process, and complexity of research objects; to clarify, describe, offer more detail; and to develop conceptualization.

¹⁹⁴ Punch, K.F. (2000), *Developing Effective Research Proposals*, London, Sage, p. 56

¹⁹⁵ Dick, op cit., for more detail under “sampling”.

¹⁹⁶ Sarantakos, S. (1998), *Social research*, Hampshire, Palgrave, p.191

3.1.3. Participant observation and adaptation of methods from Participatory Rural Appraisal (PRA)

My thesis adapts this approach to help in learning more about rural life and in depth conditions from, with and by rural people based on mutual learning. Robert Chambers explains the essence of PRA as “ha (ving) been derived from practice and what has been found to work, not deduced from a priori principles.”¹⁹⁷ My approach is , however different from PRA in that I am an insider in the community , not an outsider and this research is not rapid in the sense used by Chambers, because I based the research on my lived experiences in the community and I am returning to work and live in the community. The principles on which I base my research are drawn from and adapted from Chambers¹⁹⁸; they can be summed up as follows:

- Facilitation, not domination;
- Shifting the balance from closed to open, from individual to group, and
- Partnership and sharing of information, experience, food and training, between organizations.

3.1.4. Interviews

Semi-structured interviews with open-ended questions were employed as the research method of data collection in the field work. In qualitative methodology, according to Sarantakos, interviews are ‘basically semi-standardized and open and use a standard technique of data collection.’¹⁹⁹

¹⁹⁷ Chambers, R. (1997), *Whose reality counts? Putting the first last*, London, ITDG (Intermediate Technology Development Group), p. 104

¹⁹⁸ Ibid.

¹⁹⁹ Sarantakos, op cit., p. 255 Sarantakos uses some significant criteria to characterise qualitative interviews:

- They use open-ended questions only;
- They are mainly single interviews, asking one person at a time;
- The structure of interview questions is flexible as an interviewer may change the question order and even sometimes add new questions where necessary;
- In order to meet the research’s aim, interviewers are allowed to present the questions, change wording and order, and adapt the interview.

Moreover, some technical elements and methodological aspects of qualitative interviewing identified by Lamnek and Pannas are very useful to provide interviewers with a significant guide to the interview process over the period of data collection:¹⁹⁹

- *Reflexivity*: Qualitative interviewing employs methods and a process of analysis that reflect the nature of the research object rather than the methodological conviction of the researcher.
- *Naturalism*: Studying everyday life events is a focus of qualitative interviews.
- *Primacy of the respondent*: The respondents are not merely a source of data and an object of the research. They are also experts who supply valuable information for the study and therefore they are as important as the researcher.

Open-ended questions, however, have some limitations identified by Becker, quoted by Sarantakos as follows:²⁰⁰

- They are not very appropriate if the research questions are sensitive to the informants, values, beliefs, and experiences.
- They are not appropriate if the respondents cannot express feelings and thoughts well.
- They are time consuming. They need extra effort to code and evaluate if they provide a mass of information, leading to less accurate and valuable outcomes.
- They can produce information which is not important or relevant to the study.
- Further processing is required if statistical analysis is needed to achieve the research's outcomes.

-
- *No standardization*: Qualitative interviews are unstandardised interviews, in which the guiding element of the interview process is the everyday life of the respondent, not the methodological expertise of the researcher.
 - *Openness*: Qualitative interviews use an unstandardised approach, which apply a readiness to change, to correct and adjust the course of study. Interviewers are expected to play a passive and encouraging, not dominating, role to promote open discussion with the respondent.
 - *Flexibility*: The qualitative interview pursues the findings emerging during the interview process.
 - *Life as process*: The researcher is expected to perceive that the respondents' everyday lives are presumed to be changeable, expandable, and adjustable.
 - *Grounded theory*: The attempt of doing qualitative interviews is mainly generating 'a data-based theory', a grounded theory.
 - *Explication*: The emergent themes found in the process of interviewing are expanded and discussed in detail during the interview process.

In order to meet the characteristics of qualitative interviews mentioned above, open-ended questions are employed in this study. Open-ended (free answer) questions, according to Sarantakos, have many advantages and several limitations:¹⁹⁹ The advantages are:

- The respondents are free to provide their answers appropriately in their own way and in their own words, particularly when complex issues are being studied.
- The questions provide more details, particularly qualifications and justifications, than fixed-alternative or pre-coded questions.
- They unveil unexpected information in areas to the researcher.
- They allow the researcher to make conclusions about the way of thinking and logic of the respondents.

They allow the respondents to show their own volition, creativity and initiative.

²⁰⁰ Ibid.

3.2. Research Design

3.2.1. Criteria Chosen

Possibilities and the Basic Minimum Need Information (BMN)²⁰¹ index are basic criteria to be considered in selecting significant informants who could participate and provide information for this research. ‘Possibilities’ here means accessibility and availability. Access to an available source of information, particularly at village level in Thailand, is not easy for any type of formal study by outsiders. These may find it more difficult a challenge to search for data or information from target groups in rural areas without realizing and gaining trust from the people.

Other indicators chosen as fundamental criteria in selecting the field work areas will characterize the intangible resources of people’s capacity (such as skill and experience; social cohesion and social capital; habits and traditions; and institutional culture), the participation of people in social and political areas, and their economic status. These indicators have been developed as the Basic Minimum Needs Information (BMN), by the Community Development Department of Thailand. This Department is responsible for promoting the decentralization process by empowering the community organizations, their network and people to be able to make decisions on community development management using a community development approach through community forums at village and Tambon (sub district) level. The indicators are shown in Table 3.1 while Appendix 2 ranks the Tambon in Udon Thani province, 2000 by BMN indicators (as percentages). This province comprises 20 districts and 144 Tambons (sub districts).

²⁰¹ BMN is an official quality of life index used in Thailand based on household information that presents different aspects of the life quality of household members over a specific period.

Table 3.1: BMN indicators

Group No	Indicators(I)
1. Widespread possession of Education	I1.1 14-50 year old people can read and write Thai I1.2 A household receives advantageous information at least 3 times
2. Willingness in participation	I2.1 A household is a member of local groups I2.2 The household members use their election rights I2.3 A household maintains public properties
3. Religious tradition and Temple attendance	I3.1 A household carries out religious attendance at least once a week I3.2 Households carry out traditional activities
4. Household income/person/year	I4.1 Average income/person/year (Baht) I4.2 A Household has an average annual household income more than Baht 20,000(Approx. AUS\$850)

3.2.2. Areas

As shown in Appendix 2, in 2000 all Tambons (sub districts) in the case study areas have high percentages possessing education (on average 99.8 for literacy rate, and 99.2 for advantageous information obtaining and participating in local and religious groups (on average, 92.6 and 98.3 respectively). Only the differences in economic status such as income level (average income/head/year) characterize the big gap among these Tambon communities ranging from Baht 733 to 46,000. Based on, therefore, the average income level of these Tambons (at Baht 14,047), it was decided to select “A” tambon in Nong Wua Saw district as the study field work. The basis for making the choice of area was on my familiarity with the area and because it is broadly representative of a less developed rural village.

Table 3.2: Case study sites

Tambon (sub district)	Local government	School	Community leaders	Total
1. Nong Wua Saw	1	4	1	6
2. Meung Parn	2	2	1	5
3. Non Thong	1	1	2	4
4. Klang Yai	2	0	1	3
5. Nong Hua Ku	2	1	1	4
6. Khauw Nam	1	3	2	6
7. Kom Bong	2	3	2	7
Total	11	14	10	35

In the above table the numbers refer to the number of people interviewed.

3.3. Tools for analysis

3.3.1. SWOT analysis

SWOT analysis is “the well-known method of creating a table of strengths, weaknesses, opportunities and threats” in building up “actions and strategies”.²⁰² The SWOT Analysis technique was employed as a tool to help to examine the situation uncovered by the research study and to investigate possible opportunities by itemizing strengths, weaknesses, opportunities and threats (SWOT) in that situation. This technique was applied to the apparent key emic themes induced from the informants in my discussions with them.

3.3.2. Churchman’s Critical Unfolding

Ulrich develops 12 questions which were derived from Churchman’s Critical Unfolding, cited by McIntyre²⁰³, to unfold the implications of particular approaches by

²⁰² Coyle, G. (2004), *Practical Strategy: Structured Tools and Techniques*. Harlow: Pearson Education, p.88

²⁰³ McIntyre, J. (2004), 'Facilitating Critical Systemic Praxis (CSP) by Means of Experiential Learning and Conceptual Tools', *Systems Research and Behavioral Science*, vol. 21, pp. 50-51.

inquiring into: How do we know what to do?, What is the best approach?, Why is it the best approach?, and Follow the questions with further questions to unfold the issues.

For Ulrich 'Unfolding' refers to a dialectical tool that helps a researcher to consider opposite points of view. His questions are:

- “(1) Who is the actual client of the systems design?
- (2) What is the actual purpose of the systems design?
- (3) What is its built in measure of success?
- (4) Who is actually the decision maker?
- (5) What conditions of successful planning and implementation of the system are really controlled by the decision maker?
- (6) What conditions are not controlled by the decision maker (e.g. environmental)?
- (7) Who is actually involved as planner?
- (8) Who is involved as expert, and of what kind is the expertise?
- (9) Where do the involved seek the guarantee that their planning will be successful?
- (10) Who amongst the involved witnesses represents the concerns of the affected?
Who is or may be affected without being involved?
- (11) Are the affected given an opportunity to emancipate themselves from the experts and to take their fate into their own hands?
- (12) What worldview is actually underlying the design of the system? Is it the worldview of some of the involved or some of the affected?”

CHAPTER 4
THE VOICES OF THE INFORMANTS: FINDING THE CAUSES OF
DEVELOPMENT GAPS
BETWEEN SCHOOL AND LOCAL COMMUNITY

4.1. Introduction

This chapter will present the summary of some of the findings which were based on interviews with representatives of local stakeholders – schools, local communities, temples and local government in the target area. Also the tool used for subsequent data analysis – SWOT – is briefly introduced.

But first of all I will describe the rural villages that are very different from the provincial facilities. It is in the small villages that research was undertaken and how I came to do the research as a result of being an educational facilitator and trainer in schools and in the temple.

Life is based on agricultural activities such as rice, cassava and animal husbandry of cows, pigs and buffalo. The pace of life is very slow, but people have access to electricity and television and so soon the life could change. People live in houses they build themselves in each village. There is an average size of 350 houses per village in my province and one telephone booth for them. Every rural school has computing hardware, but they do not have phone lines.

The main purpose of the chapter is to present the findings and to categorize key themes of the study in relation to school and local community. The corresponding findings and themes related to local religious institutions and local government organizations, or Tambon Administrative Organizations (TAOs), will be presented in Chapter 5. The key themes will be explored by a grounded theory approach using the voices of informants from the field work. These will be the basis for attempting to answer my research questions posed in chapter 1 through the analyses in this and the next chapter. In this exploration for key themes I will refer to the questions and try to answer them using the voices of my informants and what they have taught me about their perceptions and their needs. I will then comment on their stories using my

research experiences of speaking and discussing with many informants and using my learning from reviewing the literature.

Box 4.1 reminds the readers of the rationale of the research described in Chapter 1. The analysis responds to what was discovered in the field work and the results of this will be related to the conceptual model illustrated in Figure 1.2, “Interrelationships between network of partnership, joined-up government and the governance of society”. The outcomes of the data analysis which were reflected in and induced from many experiences of case studies, helped the researcher to address that conceptual model by: i) Gaining more understandings of the strengths and weaknesses of the stakeholders – schools, temples, communities and local governments - which are relevant according to the research literature; ii) Applying the new insights into practical development problems on the basis of the model; and finally iii) Recommending practical and related policy based on an integrated development perspective offered by pragmatism (see Chapter 6).

Box 4.1: Rationale of the research (from Chapter 1)

1. To explore how ICTs can play a role as a capacity building tool to bridge the imbalanced development in rural areas in Thailand.
2. To provide a framework for adapting ICTs to rural Thailand which may help to achieve greater rural participation through integrated development, including by supporting entrepreneurship.
3. To design a plan or framework for the interconnectedness of institutions and organizations at local, regional, and national levels to balance the development in rural areas.

Obviously, it is realized that proposing the potential benefits of the technologies of information and communication as an important tool to promote development, particularly in rural areas, does not mean that it is believed that the technologies alone are sufficient to help individuals, groups, organizations and nations to meet their goals. As shown in Chapter 1, apart from the concept of ICT for rural development, the research literature also demonstrates the importance of four other concepts: i) capacity development; ii) entrepreneurship; iii) knowledge management;

and iv) sustainable development. The case studies in this research are interpreted in relation to these concepts.

4.2. The Informants

4.2.1. Socio-demographic analysis

The informants were members of institutions in several villages in the target area (see Table 4.1), holding different official positions and of both sexes (see Table 4.2).

Table 4.1: List of local institutions

Villages	
	1. Don Tarn
	2. Dong Mu
	3. Noonthong
	4. Noon Sombon
	5. Na Luam
	6. Nong Hua Ku
	7. Pu thong
	8. Jumpamong
Schools	
	1. Nampun School
	2. Nong Weang Derd School
	3. Nong Saeng Soi School
	4. Dong Mu School
	5. Yang Kon School
	6. Baan Po School
	7. Baan Thiam School
	8. Nong Krung Sir School
	9. Nong Phai School
	10. Dong Yen School
	11. Chumnae School
	12. Na Luam School

TAOs	
	1. Nampun
	2. Nong Hua Ku
	3. Noonthong
	4. Kom Bong
	5. Wang Seang
	6. Hai Soke
	7. Klang Yai

Table 4.2: Position and gender of informants

Organization	Position/Gender				Total		
	Head		Kamnan				
Village	Female	Male	Female	Male	Female	Male	
	-	4	1	3	1	7	8 (25%)
School	Administrator		Teacher				
	Female	Male	Female	Male	Female	Male	
	1	5	7	-	8	5	13 (39%)
Local Government	Administrator		Representative/ Officer				
	Female	Male	Female	Male	Female	Male	
	4	2	2	4	6	6	12 (36%)
Total					15 (46%)	18 (54%)	33 (100%)

They were from three local institutions; eight villages or tambons (sub-districts), twelve schools, and seven local government organizations. Of the thirty three informants eight were village or tambon leaders, six were administrators and seven teachers in schools in the same areas, and six administrators and six officers from seven local government organization or Tambon Administration Organization (TAO or *oboto*) units.

An effort was made to obtain a gender balance among informants, eventually 46% were female and 54% male. It was quite difficult to find women to meet the

study's requirements as community leadership in Thai villages is normally dominated by men. Only one of the samples of village or community leaders was a woman, a *Kamnan's* assistant working in this area. In the long history and unique culture of Thailand, the country has never had a woman as a ruler. Even nowadays, only men can be allowed into some places within a temple. Therefore, villagers tend to choose men to be their headperson and *kamnan* otherwise they can not work together with monks who are seen as important 'knowledge brokers' in that area. In the past it was impossible to find a woman as a chief of village, headperson, or *kamnan*.

However, women traditionally and culturally have been playing social roles as important, or more so, than men's in some areas, such as nurturing and educating children. As a result, women's social role in relation to development, for example in the area of education, is highly respected. Male resistance to female involvement in education development is minimal. According to Thai cultures, which are mainly based on Buddhist concepts, people conceive that there is no gender issue on knowledge, or in the other words, knowledge cannot be classified as male or female or by gender. Knowledge exists beyond any concepts of gender concerns. This norm, therefore, leads women to be powerful players in relation to development, especially in areas of education in order to create, produce, recreate, reproduce, shape and reshape some social norms and values. Therefore it is not surprising that in this study the majority of the informants in the schools were women. Although, probably for reasons already discussed, there was only one female headmistress among the five male headmasters female teachers accounted for 100% of those who want to get involved and willingly contribute and share their knowledge and ideas with the researcher. Similarly in the working area of local government, women have gained more responsibilities and powers and are becoming more equal to men. This case study gives some evidence to confirm that in the area of working in public sector in Thailand especially in rural areas there is obviously no gender inequality between men and women regarding working to better serve other people and community. In this study half the local government officials were female, two at administrative and two at middle level. They account for 50% of the case studies of local government. At the higher, administrative, level two of the four were responsible for local development as TAO deputy directors, while the others were a deputy of a *Kamnan*, and a head of a TAO's financial department. Furthermore, in this study 50% of members of TAO

council belong to women. It is important to emphasize that these percentages refer only to my case study which is not necessarily statistically representative of the rest of Thailand.

4.2.2. Roles and rationale for inclusion

In rural areas of Thailand, Tambon Administrative Organization (TAO), school and community leaders are important rural stakeholders and beneficiaries in ICT for development initiatives from government, academic and community sectors respectively. Therefore, they could play some vital roles at community level to facilitate and maintain ICT programmes such as:

- Awareness-raising role

Harnessing ICT for human development requires awareness-raising among all sectors and actors nationwide.²⁰⁴ In a remote area the TAO is the local government agency which is the key player and technological facilitator to service the rural people socially and economically. TAOs can act as ICT promoters especially in terms of building and maintaining basic telecommunications infrastructure. For example, the Tambon Internet Centre is one of the government ICT projects undertaken by TAOs to raise awareness and deploy the new technologies to address long-standing government goals in rural areas.

The new technologies are effectively geared to high levels of basic telecommunications infrastructure, for instance landline, coaxial cable, and fibre optics, and to electrification, but also to high levels of literacy.²⁰⁵ A school can be conceptualized as a formal education centre which comprises higher educated human resources compared to others in the same area, available to provide and develop literacy and basic required skills to both students and other people in its area. It seems, from the information gathered from informants, that they believe that many rural people usually feel uncomfortable to learn and use some new technologies. In this respect, a school in a remote area can encourage and promote ICT use. It can change the mode of operations in delivering information and knowledge to the citizens of its

²⁰⁴ UNDP, *op cit.*, p. 3

²⁰⁵ *Ibid.*, p. 3

area. It could also try to work with homeless and street children through outreach with other community centres.

In this study, community leaders in rural areas, such a head of a village, a chief of a sub-district, school principals or teachers as well as monks in a temple, played the role as community knowledge brokers who have had an information and knowledge monopoly in villages for many decades (especially religious leaders). They have to get involved in any ICT for development initiatives at the first stages of the development programmes. Otherwise, they could see the ICT programme as “a threat to their monopoly as knowledge brokers within the villages.”²⁰⁶ Perhaps the community leaders need to see themselves as information and knowledge or development facilitators not as monopolisers. An effective joint participation by TAO, school, and community leaders can raise awareness in common understanding and working together in order to harness ICTs as enabling tools for development.

- Supporting role in access to basic ICTs.

In remote areas, there is a variety of economic, educational, and socio-cultural barriers against individual access to basic ICTs. In theory, these rural organizations, for example schools and local governments, could act as centres of distance learning providing and sharing information and knowledge with the massive networked world outside the community and help to ensure that government resources and services are effectively accessible by all groups of local people. At community level, they could be not only centres of resource and service provision, but also information and knowledge gatekeepers.

4.3. The study's stakeholders

There are four important local institutions for the analytical purposes of this study; school, local community, religious and local government organizations. The institutional stakeholders of this study include:

- School
- Community
- Temple

²⁰⁶ Ibid., p. 7

- Local government at sub-district level

4.4. Results of a SWOT analysis of key themes from schools

Key themes derived from a grounded theory analysis of the interview transcriptions from my informants in local schools were sorted into the categories of a SWOT analysis.

4.4.1. Strengths

4.4.1.1. Awareness of potential of new technologies

As I mentioned earlier the role and rationale for the inclusion of the participants was their relevance to the aim of this thesis in addressing the harnessing of ICTs for human development. This requires awareness-raising across all levels of society. By the same token, any use of ICTs for rural development initiatives and programmes needs awareness and understanding amongst the community stakeholders and beneficiaries of how the technologies' potential can be used to address the concrete problems of rural people and their own needs. In this study, these include community leaders, school teachers and local government officers. The case studies show that most rural beneficiaries have become well aware of the important roles of the new technologies, especially the Internet.

Informants²⁰⁷ proposed that, for educational institutions, the new technologies should be used as tools to promote and improve the learning process in school by providing teachers with training to use the internet and computers to benefit the students.

One case of this was *BK*, a deputy director of a high school, who is in charge of the computer laboratory of the school. He believed that the new technologies could greatly assist his school in building the skills and capacity of both staff and students. In his words:

From my point of view, it would be very convenient if we would have the computer system such as the Internet for data input and information exchange between us and our head offices in the city. It would be easier for us to process and communicate our information... when we gain more

²⁰⁷ As a means of identify the informant's words from the researcher and the etic perspectives, the forma from here on will be informants' quotes will be identified in *italics*.

information and knowledge; we will be able to transfer this because our school is the central rural education centre here. It can disseminate acquired information and knowledge ... appropriate (to) the school and community to pupils who, we know, are parts of the community.

More importantly, he was aware that the potential also could assist him and his school in obtaining and promoting their capacities, in order to develop and support learning processes in the school and community.

This awareness of the potential also is recognized by other cases from other schools, for example in the words of *PC*, a teacher in a primary school:

The use of a computer, for documenting, would be very convenient. I expect that I would be able to edit and correct it many times as I want to do. The document could be stored in the computer and be retrieved whenever we want to use it again and again. My work could be getting better because I could finish it on time and save more time and energy to do other jobs.

This advantage was seen to be useful for her but also for her colleagues in the school as well.

I think not only I need this kind of support; my friends in the school do the same. Even if I never had my own computer, I expect that it could be very good because I have to change, just a little and I have to practice and learn how to use a computer.

In addition, *PC* partly understood that the new technologies could play a major role in management of knowledge, for instance in her saying:

A computer's value is the convenience of data management. It can be used to store and retrieve the information in a computer. I mean it is easier to manage and search the data and information. Moreover, the pupils are able to learn not only how to use a computer and turn it on and off, but also study many subjects from CDs. The Government agencies regularly give the school some CDs supporting us in teaching in a class like geography, environment, mathematics, and etc. Therefore these media can help the pupils a lot in learning apart from studying from a teacher. From my point of view, kids are able to learn and use a computer faster than all of us.

From her point of view, knowledge and capacity building are closely relevant to each other. She appeared to understand and realize that the new technologies can promote and increase ways of knowledge management by her and her own school (such as in creation and enhancement) and then help her to enhance necessary capacities for developing school and community in her saying:

Without having knowledge we could not do anything. The best value therefore is knowledge. Even if we have it a little, we could earn it more by studying and learning all the time particularly in the new technologies area. I am sure that life-long learning plus the benefits of new technologies could increase my own status or capacity to help the development of school and community. I think the main point is we have to develop ourselves first... I have many good chances to help the society effectively. The most important thing is we have to help ourselves first and then the society second. Especially, in this era of the new technologies, everything changes fast and faster. The Government has applied many development projects covered many areas- economic, social, business, education, political etc.- at the same time. So, it is best time for us to increase capacity by learning and studying more. Everything depends on us if we think we can and we try, then we will achieve. This is the way forward issue more or less.

A third case of an informant in a school being aware of the positive potential of the new technologies was a deputy director of a primary School, CS. He assumed that the provision of new technologies could promote not only the capacity of people, but also participation between people who live at different areas, for example, in local villages and other cities. A school equipped with the ICTs could be an information centre in rural area providing information and knowledge to promote education of local students and people.

I think the provision of ICT could help us to raise more money to promote the development in this village by communicating our villagers with others who work in big cities across the country including overseas. Moreover, the school will become the real information centre to provide more education to the pupils. ...

The potential benefits you mentioned will improve our school capacity a lot because the ICTs are one of the best strengthening devices. They can be

very helpful to improve and increase our capacity in doing everything even through to enlarging our knowledge. ...

This could be beneficial for self learning at least. Some people and pupils do not need to go to the city. Save time and money and use them usefully.

SP, a deputy director of a secondary school concluded that the benefits of ICTs may turn a school into a community centre connecting both people and local institutions to work together with this community centre being a pool of information and knowledge which can be available for the local people and institutions to use and share with the outside community.

We don't need to go to city to get a piece of a government document, we only need to turn a fax machine on and wait. It is enough and we could do something like that to send only a piece of paper to the head department. That is one of many good benefits of having a telephone line.

Moreover, it was seen as easier if the documents were on the internet.

Our society has a trend of using ICTs to connect every activity of local community, for instance of education, culture, local and national politics across country; and linking people in every region together. So, if we could use those facilities effectively, its outcome could be very high. ...

Those potential benefits could be very useful to the school. If the basic infrastructure, the Internet, and necessary application software are available for us and then we could send our staff to get training, the school could be the centre of information and knowledge of this community. It is highly possible to do that. The staff could be a good representative and contribute to community development. ...

We could help the community a lot whatever the issues in healthcare projects ... (or as an) information centre for agricultural business development. I think the school has a capacity to do that for the community. We have a seminar room including necessary facilities like the computers, overhead and projector, and so on to support the cooperation in development processes of the community. If we had the Internet connection, we could provide the community a CD of information and knowledge relevant and matching to their needs.

SP also agreed that the ICTs could help to promote local teachers' capacity in order to give a better help to other people.

If we had ICT facilities, we could work together with other people of the community including having more chance to increase our capacity ... to help other people.

According to IT, a secondary school teacher:

We know that acquiring the Internet will provide us online to obtain information and knowledge on websites. The technologies could give responses to teachers, pupils, and learners in a very short time.

She believed (as many other teachers in this area do) that ICTs not only give her an opportunity to online access to educational resources and to share many kinds of information and knowledge faster than the past, but also to promote and support her daily work at school and home.

The value is that we know what is going on in this province, this country, and the world. I would be able to immediately access the information and knowledge about which I want to know and learn on time. And I am proud to do that. ...

If we got that system, we could communicate and share information faster. Another important aspect is we could develop many things at the same time and quickly. In this era, if we are slow, people will be running upfront and we are left behind finally. It is a nature of current situation. ...

Yes, we can do that by television but we can't watch the issue again and again if we would like to know more details. Then we will miss it.

The combination of conventional technologies, for example television and radio, and new innovations like computer and information technologies had been perceived by rural human resources, for example IT in this case study, as an essential tool or basic need to increase rural people's capacity, especially for those who work in education institutions. An acceptance that the combination of technologies was becoming one of the basic needs of people's life if they want to get better in their working place and home was evident:

A computer is a significant tool supporting our present works. I think a computer and TV are important ingredients in our cooking. We usually use these devices as important tools to consume in every day life. They are indispensable at home and office otherwise everything is stuck. We have to

use or get it. There are many benefits of using those facilities. They already become our basic needs of daily life. If you don't have or can't use it, you are already out of date.

Similarly *JC*, a teacher at a secondary school, not only perceived the advantages of new technologies but also understood that users' capability in using the new technologies need to be consistently developed and promoted if we would live to reap those benefits effectively, perhaps, by learning and working with other professionals or organizations which are skilful at how to use and apply the new technologies.

I expect that ICT provision could help us in doing our jobs, helping us in data or information manipulation. Convenience and speed are main benefits of the use of the new technologies. If we had enough capability to use it, it could be very useful to improve and develop our career to be more successful. It is possible that we could learn some useful techniques or new knowledge for working from other people or organizations from different places through the world of technologies.

4.4.1.2. Willingness to help and support

A willingness to help and support is one of basic components to enhance, strengthen and reinforce the extent of social organization, such as in networks, norms and trust which facilitate coordination and cooperation for mutual benefit of people within and among organizations or institutions. This positive disposition can better support a network of partnerships in terms of the enhancement of coordination, interconnectedness and interdependence at institutional level and of trust and reciprocity at individual level.

Some case studies assert that teachers, 'haves', able to access the new technologies, are willing to help and support people, the 'have-nots', who cannot. Even though the 'have' can not help 'have-nots' much in terms of the latter's productivity or performance improvement, it may produce a lot in terms of creating and enhancing trust, reciprocity among people within a community and coordination between teachers themselves in order to making an effort to help the poor or 'have-nots'.

To achieve the goals of helping and supporting the people in community, PC, a teacher in a primary school, reported that sometimes she had to do a job for them because they do not know how to do it.

For the people here, for example, they usually come to the school asking us to issue an official paper, letter, or a public announcement; or to disseminate some information publicly or privately. We type and print those for them. I think this kind of help is partly the school's support to the community.

IT, a female teacher at a secondary school, also sometimes uses her own computer to teach students in her school class because the school lacks computers for teaching.

At the moment we start teaching the introduction to computers to the seventh year pupils up to the ninth year. Next year, if we were provided with more computers, we could expand to younger pupils. ... (but) we can't provide that much to other pupils because of a lack of computers. At the moment, we have used teachers' computers, not belonging to the school, to support teaching/learning in class. The computer now being used in class I bring from my home.

Moreover, she can use computers as a strategic tool to support community development projects such an anti-drug program for students and rural people. As she is then able to take the opportunity to talk and discuss with people their current needs and problems. She understands that she cannot go to the village and ask them directly what kinds of help she could give them. She therefore strategically exploits the computer for community development.

Some teachers here are trainers helping the community development. For example, I am a community trainer to prevent pupils and people against drugs. A computer helps me a lot to do that job of helping people. It is a versatile instrument. ...

If we understand the people's needs and problems and then go to their community, work with them, talk with them, and finally be able to support their needs, even if sometimes we can't help them in everything, we can reach aims of development. I think we need other people to talk to them and understand their needs and then work together. If we don't understand

and only demand they come to see us and think that we could help them later, you will fail for sure.

4.4.1.3. Basic computing equipment are available and affordable for only some people

Access to information is seen to be as central as education in creating human capabilities which can support the progress of national development as a whole. Rural people individually have less opportunity to access the new technologies because of many inevitable obstacles; physical, economic, educational, and socio-cultural/political. Some organizations in remote areas, such as schools and local governments, can provide their students, staff and even ordinary people with basic computing equipment such as personal computers and printers for their basic needs and learning in their organizations. However, only a few of those in those organizations are able to access even this basic computing equipment. And more importantly, very few, especially ordinary people, are capable of taking effective advantage of its potential.

Primary school teacher *PC* explained that the computers, including some multimedia CDs, provided by the government in her school are useful for both teachers and students in terms of helping their work and learning:

The school's computers are partly used to manipulate students' information supporting our learning and teaching such as school attendance of students, their grades, and etc. These benefits are useful for both of us - teachers and students. ...

The Government agencies regularly give the school some CDs supporting us in teaching in a class like geography, environment, mathematics, and etc. Therefore these media can help the pupils a lot in learning apart from studying from a teacher.

Secondary school teacher *SP* also reported that there are some personal computers in his school even though they are not enough to serve their needs:

Pupils, at year 5, 6 up to year 11 and 12, can use word processing and read an article from a CD. It is no problem for children here. The government provides us with many education CDs in which children can

watch and learn in the computer room. We have 10 PCs there but we have not enough budget to install a computer in the library.

The provision of technological equipment in school has provided some benefits not only for students and staff in the school but also for helping and promoting working together between teachers, as high skill human resources in the community, and other local government members to run community development projects. *UP*, a TAO member, recognized and supported the benefit of the new technology provisions of local institutions:

Every school has computers at least for teachers. A school has more chances than other local organizations to have and use the technologies. For example, there are more than 20 computer sets in the Kombong School. Basically, the school and TAO work together in village projects such as the village funds.

This shows that local people and local institutions in remote areas of Thailand have started reaping the advantages of new technologies by applying them in their daily work and trying to learn how the technologies may better help changing and enhancing their quality of life and performance.

4.4.1.4. Some new technologies are affordable and available for most people

The old ICTs such as radio and television have played a central role as information and communication channels for the central government to provide general data and information to citizens especially the people in remote areas. However, in the current situation the old technologies have become out-dated, except for television. From the interviews of this research, it was found that most of the case study informants could afford some items of the new technologies and accept that the new technologies, for example mobile phones, are important tools to connect and communicate with other people both inside and outside their organizations and communities. This affordable technology is an alternative communication tool to compensate for the lack of landlines. Mobile phones also assist people who work in rural areas to create and maintain a degree of social empowerment.²⁰⁸ Nowadays, a mobile phone, an item of wireless technology, is affordable for most people who work as community leaders and in both schools and local government offices, and including

²⁰⁸ According to John Gaventa and Andrea Cornwallem, empowerment 'is the extent to which it is able to link the three (knowledge, action, and consciousness), to create more democratic forms of knowledge, through action and mobilization of relatively powerless groups on their own affairs, in a way that also involves their own critical

some other rural people in the region. Mobile phone use is a bit costly for users in rural area who, on average, have lower incomes than those in urban areas. Even the phone usage in a school has to be paid for by the teachers themselves. However, they have no better alternatives to choose. For example, *PV*, the director of a secondary school at Nong Saeng Soi said that:

I use a mobile phone for working at home and school. The Government hasn't provided us with telephone lines. I requested a telephone but it is not available now. So, I have to use my own mobile for school and I have to pay the phone services by myself. There is no budget for this.

Nevertheless, currently this wireless technology is spreading across the nation to compensate for the lack of a conventional telephone system which would need a huge investment from the government.

4.4.2. Weaknesses

4.4.2.1. Lack of access to data, information and voice

Computers have become more increasingly important in rural Thai schools over many years. They are used in developing basic skills, such as reading, writing and number work, to support data and information manipulation. Although the new technologies themselves are only tools for growth and development, people who are able to access them are getting better opportunities to become more competent than those who are not.

Nowadays most teachers in schools, even in rural areas, have some experience in using the new technologies. Perhaps some of them, especially senior teachers at rural schools, did not have a chance to use a computer in their work but at least they were trained how to use it, sometimes in a training centre in a city. Most working in schools need to use the technologies in their offices to access data, information and knowledge, apart from for ordinary jobs using office software such as word processing and presentation software, because of a lack of computer networks.

A teacher from a secondary school, *SP*, reported:

reflection and learning.' See 'Knowledge, Social Change and Empowerment' in Gaventa, J. & Cornwall, A, op cit., p. 76

There are needs for searching information and data in a government department and sending official documents among my colleagues in this province and other cities.

He said that the computer network, such as the Internet connection, can be very useful for sharing information between government offices nationwide:

The provision of ICT could help us, remote school teachers do many jobs effectively and on time ... (because in the current situation a) piece of paper from the education ministry has a long way before reaching us. From the office of the ministry to the regional office and then to the provincial one and then to the district office and then, finally, to us. Can you imagine that? If we had a fax or the Internet, (they could) just ... directly send to us through it and copies to other offices if they want.

But in reality, he has no chance to use those technological advantages to do his job more effectively. Moreover, his school cannot ask other local governments in the same area for help to access and share information due to the shortage of landlines or other electronic technological network. Government officers, for example teachers and TAO officers, have to continue to wait for pieces of information and documents. Communication channels for information dissemination to community leaders, including teachers, mainly rely on the conventional older technologies of television and radio. And then they provide the information to the people in a community through a village ‘sound-on-wire’ system from an office to public loud-speakers.

JC, a teacher at a secondary school, described the current situation of data and information dissemination within her community:

I think there are not any local organizations which can access or use the new technologies besides mobile, TV, and radio because of there being no telephone line here. In the community, their leaders, I mean a headperson and kamnan, usually use the tower of information dissemination or the sound on wire²⁰⁹ to provide data and information or to talk to the people community-wide. There is no data or information online through a computer, even a computer itself for public use.

²⁰⁹ As described in Chapter 1, the ‘tower of information dissemination’ or the ‘sound on wire’ comprises big speakers used for broadcasting news and information to people, usually located in the middle point of the village. This system is in every village in remote areas across Thailand.

Lack of access to data and information, particularly updated or online versions, may cause unprecedented or unexpected problems for economic and social development, including health hazard prevention. In contrast, most computer software companies in Thailand nowadays have delivered online supports for those of their customers capable of receiving this. It is very convenient for them to keep the customers up to date with, the usually frequent, changes in technology.

4.4.2.2. Lack of capacity to apply the technology

Lack of access to data and information may reduce the capacity of users to use the technologies, which are only tools, effectively and efficiently for growth and development. Without IT skills, it is very difficult for IT users to be able to take much advantage of new technologies.

Some informants, for example *BK*, a deputy director of a high school, described how, even though he has had much raw data and information about his school and some personal computers available for data manipulation, he and his colleagues cannot do that job because of lack of IT skills:

You can't see any communication systems and useful information sharing systems in here with other schools and outside world. Moreover, the information is still kept in its cabinets. There are no information and research systems to deal with that information. ... Actually, we have many types of data kept in this place. It, however, lacks a process of data analysis or research. I think this is our greatest information need.

Moreover, *BK* stressed that a lack of tangible resources, such as telephone lines and access to the Internet, hinders the capacity building of people who live and work in remote areas:

To date, people here have enough money and knowledge to exploit the ICT resources to develop themselves as well as their own community. The problem is the dearth of telephone line, unable to access the Internet, non-existing information sharing systems, and etc, preventing us from knowing what is exactly the potential value of ICT provision or accessibility suited to us and the community.

Many other teachers working in this area have experienced being incapable of using the new technologies at schools. Lack of IT experts or technicians, including for applications software which needed to be installed and frequently updated, is an important problem leading to an inability to apply information technologies in work places. Primary school teacher *PC* told me:

I previously got training on how to use a computer in school but I think it was only a basic technique. It is a pity my computer skills are poor, so I can't use it effectively. ... In the past, I had some important skills in designing a thing by using computer software but now I have completely forgotten. I know my problem is lack of a computer with the software here. That is why in a few years I have forgotten everything.

She said a good training and budget to support it can help to promote and increase users' skills in using ICTs or teaching IT for students effectively.

CS, a deputy director of a primary school, confirmed this weakness of rural schools in trying to apply the potential benefits of IT to assist people who own computers:

Because of lack of a sufficient budget, an Internet connection and staff who are expert in modern technologies, the school is able to provide the community with just only simple help, not too complicated.

Not only do people lack this service from IT experts, but teachers in school also encounter this difficulty to exploit their own computers. A secondary school teacher, *IT* complained that, "I have limited computer skills but I certainly have a landline at home." However, she could not install the Internet connection in her tambon's area even if she has a computer and telephone line because there are not any computer technicians there.

PV, the headmaster at a secondary school, could not apply the 10 computers in his school for benefiting students' learning. This school has obtained some multimedia CD-ROMs of learning contents for both students and self-training provided by the education office headquarters after he got training how to use IT in school. However, there are not many of these CD-ROMs.

The Government also arranges IT media for schools. The IT media are almost all in CD form but they are not many, just 4-5 CDs. These media support our teachers in teaching.

A major problem is that he and his computer staffs do not know how to use the materials. They are still kept in a cabinet in the computer room. He believes that the students are too young, he prefers using conventional technologies, such as television, for teaching rather than combining the old and new technologies for better outcomes.

As I am the headmaster here and due to students being too young, I only use TV to communicate suitable information to them. They can only watch at that and couldn't exchange any information like we do.

During the period of this research, his school was continuing to receive new learning materials published on CD-ROM from the central department of education.

4.4.2.3. *Insufficient intellectual capital*

The combination of shortages of tangible resources, including financial resources and physical assets such as infrastructure (roads, water supply, electricity, telephone lines, and so on) plus remoteness cause human resources in that area few good chances to develop their capabilities, especially in terms of human capital. Even though some teachers were trained to be a head of IT staff in school, without practicing or using the technologies for a certain time it is difficult to catch up with the new technological innovations which are changing almost every day. Life-long learning processes are necessary for everyone, even a knowledge provider such as a teacher, who wants to learn more. And networks of information and knowledge continuously propelled by the convergence of information and communication technologies could make life-long learning live in creative and mutual ways supported by the coordination of relevant sectors.

As a clear example of this theme, CS, the deputy director of a primary school, reported “Even though some teachers like me got that kind of training once or two times, but I can't remember how to use the internet”.

An insufficiency of intellectual capital was widely seen across schools in the study area. If a school is to be an important institution of community development, helping or working together successfully needs devoted, competent and high skill human resources of relevant organizations to be able to provide and share knowledge and services with other stakeholders and other people. For example, in secondary teacher JC's opinion:

Working with other people, especially contributing my knowledge to help the community people, I think, has some limits. To be honest I think it is not much.

One of many reasons that have hampered her in developing capacity is a lack of enough information.

There is not much information or services available for us through the new technologies. We mainly receive information such as an educational program from conventional communication channels like TV and radio.

IT, another secondary teacher, also considered that she needs to have the new technologies to develop and promote her capacity building for her own performance and career.

I need the new technologies especially in information exchange among teachers inside and outside our schools. At least I want a computer to practice in arranging and promoting teaching and learning activities for students. It could be easier and could develop my capacity to do that at same time.

She added that enhancement of teachers' and students' learning capacity needs continual practice over time:

A teacher can't know everything, even though many people here expect us to do so. Some issues we are not sure of, we can recommend and help pupils how to do and where to go. The technologies could enhance the knowledge of both of us - teachers and pupils.

However, she has been aware of the negative side of the new technologies and that she needs to be more knowledgeable than before if she wants to be successful in this career.

If we don't use it properly, it can make many problems to us. For example, some pupils or people prefer to use it for playing computer games and then they could fail in school and jobs. Especially, now heaps of pornographic materials are on the Internet and coming along with computer media are one of most dangerous and negative things to our culture and society. In this aspect, a teacher has to be alert to this kind of problem by providing suitable information and knowledge to our pupils and people here.

4.4.2.4. Misuse of technology resources

It became apparent from the informant's comments that misuse of computers has often occurred especially in government offices in remote areas which are quite far from the central power of administration or government. Local power relationships

may lead to inappropriate use of resources within a school. For example, I was told by CS, a deputy director of a primary school, that two computer sets in a school which had been misused by the school director for his own jobs by removing one of them into his room. After that only some of his closest colleagues were allowed to use the computer. Other teachers could not do anything about this as otherwise they might get some trouble towards their work and career at the school.

4.4.3. Opportunities

4.4.3.1. New technologies in local institutions

Most remote schools in the study area are provided with a satellite phone by the government for general conversation. However, the use of this advanced technology has not yet provided its full potential to benefit the development of schools and rural communities. It is currently used as a normal telephone for conversation only. Perhaps the government has a further plan regarding the application of this technology in supporting rural education development, such as for a long-distance learning system.

In addition, public phones, a conventional technology for most people in developed countries, are available for rural people in every village, in spite of there often being only one public phone booth per village. This minor facility connects the people to the outside world and can promote social capital within and among those communities accessible by public phone. *PP*, a secondary teacher, told me:

Some parents told me that their family relations are getting better since we had the public phone in this village because they and their kids can talk to each other. I think it is very good thing here. Nothing is warm like having a good family. Like my family, my daughters always call me if they want to go to somewhere or where they are now including “Mum please picks me up here”. I feel very warm to hear and do that for my kids.

However, a public phone is not useful to set up an Internet access for a rural community. Nevertheless, it may be a significant tool to promote a network of partnerships such as building trust and enhancing reciprocity among people within and among communities, including some who live in other areas for example their relatives.

4.4.3.2. Willingness to cooperate with among community members within and outside the region

Schools have been playing an important role in supporting rural community development over many years. Human resources in a community, such as teachers, village leaders and monks have been very influential in shaping community futures. If they work together well, it is not difficult for government officers at any levels to make good progress in every aspect of development, economic, social, political or environmental. Conversely, if they are not living in harmony, it is a significant disadvantage to an interlocking of the developments.

Willingness to work together between people within and outside a community is crucial for sustainable development. Information and ideas need to be openly available to all; active people and groups should be accessible to all. In the past, people who worked and lived in remote areas had had no opportunities to share and access new information and new possible ideas which may help them to change their local worlds for the better. Willingness to work together is an essential ingredient to create and enhance the ability of members of a current generation to shape their future achievements, but also of future generations to meet their own needs. The willingness cannot be established from scratch. As Edgar described the process, it “grows out of those social interactions and networks we experience in our daily lives.”²¹⁰ It is a quality of a group, community, and institution as a whole, rather than of individuals. It is the relationships and ties, the networks, norms and sanctions that support the accomplishment of human capital.

Some of my informants see the new technologies as a possible and powerful tool that might help people to work together better than in the past by, for instance, making the people more connected. For example, in the opinion of primary teacher *PC*:

It (ICT use) could be very good indeed to have the facilities helping us to work together with the people. In this community, school is one of central institutions at which teachers, parents, and the people could closely

²¹⁰ Edgar, op cit. p. 101

cooperate in developing the future of the pupils. It is a positive trend and will be getting better than today.

She stressed that using the information and communication technologies appropriately can better support cooperation at both levels - institutional and individual - between school and village.

More elaborately, secondary teacher *IT* commented on the ICTs' benefits in helping her to work together with and better access people from other stakeholders more effectively by describing the current role of a teacher as needing to be able to act as a multi-role player whose skill combined with the skills of police (interrogation, investigation), psychiatrist (psychoanalysis, treatment, assertion) and parents (bringing up, looking after and support) and sometimes being a rubbish bin to be blamed and given negative criticisms from other people. She said that to be a multi-role player with responsibilities for multi-tasking cannot be achieved without sufficiently support from the advantages of new technologies.

At the moment, we work with other local institutions, that is the police station and public health centre, to contribute to the development of human resources in the community. We bring pupils, students, and teenagers into our training camp of drug prevention. The people including teenagers in this community told me that they didn't know about the bad effects of drugs. You know, many people think amphetamine is not dangerous to their health. It can help the people work longer. Even though, some medications sold by a shop here, they bought it by themselves. They have no information of that medication or no experts to tell them. They dose them without realizing the side effects. ... I think a teacher could play like a police, a psychiatrist, and parents including a rubbish bin of society. ... Why? If pupils or children become bad guys, the people here will blame it on the teacher failing to teach and inculcate them. In the past, a teacher had only a small black board they could teach students very well. And it seems to me that at that time, the pupils and society had fewer problems than today. Today, if we don't have the technologies such as a computer, it is very difficult to handle our jobs. It has many benefits to help us.

4.4.3.3. A community centre for capacity building

According to the participants perceptions, of the rural people interviewed, towards a school are still as good as it was as a community centre for capacity building. They believe that school is still a centre of a network of partnerships which is a place providing more space for people to cooperate culturally and socially. Computers nowadays play a role as a magnet for some people in a community which can be managed to create and improve their capability. CS, a primary school deputy director, told of the school's intention to use a single computer in his school to serve local people's needs.

It is our plan to invite and link many people to participate in developing their community and the school is the centre for doing many preparations such as using the computers to store the relevant information and then print out invitation letters, and so on.

SP, a high school deputy director told me that the provincial school library is one of the best practical samples of a modern library which is capable of providing clients with access to a 'super mega-store' of online materials and information in cyberspace. In his opinion a remote library, as a part of a community centre at a rural school, may help local clients to do the same if it could be equipped with the new technologies.

For my information needs, the school library here and in the city both can help me very much. The library in the city has everything because it provides people with Internet access. I can't work without having a variety of information.

Nevertheless, to more fully achieve the goal of being a community centre a school needs to get involved with working together with other stakeholders, both institutionally and individually, in relevant sectors of government and in corporate and civil society within and outside the community.

4.4.3.4. Some initial public-private partnerships exist

Interestingly, a network of partnerships between public/state, corporate and community sectors has occurred at this rural area. An example is the cooperation between rural schools and an international organization, PAN (Pan-Asia Networks), in

order to help rural educational institutions in capacity building by providing tangible resources, for example computing equipment and learning materials including helping and training school staffs.

PC, a primary school teacher, who has participated in some PAN projects over a few years explained that:

PAN helps us to develop our capacity in using the new technologies in school. The organization donates, for example, the computers and digital media, printers, tables and books in the library. PAN also helps us in building the IT lab and gives pupils training courses in the city every year. It is not only good for the school and the pupils, but also this rural community. And we have a project of the senior pupils helping and teaching the junior. It works every well and everything here is growing very well after PAN comes to us.

Apart from coordinating with the international organizations, her school recently has established a network of partnerships with local institutions, for instance a temple at *Naluang*, in order to build the overall capacity of the school, both among staff and students. She told me that “the latest institution giving a hand to help us in terms of providing computers is a temple at *Naluang* in this province.”

4.4.4. Threats

4.4.4.1. Negative impacts of new technologies

It seems that from the informants' generalizations that most of the school teachers in this rural area not only understood the potential benefits of the new technologies in supporting development in their schools, villages and communities, but also realized that the new technologies can bring some negative impacts which would be a threat to their society and its local people. BK, a deputy director of a high school, recognized there can be good and bad effects from the technologies:

Teachers could find some best examples in the real world helping them in learning. In turn, these could promote and support the process of studying and teaching at school. However, everything is not perfect. ... There are some possibly negative results from this development process because of many existing unsuitable information on the net. For example, they act or dress inappropriately to their own cultures including misuse of that

information leading to be disintegration of family, social class, and society. Because of the free use or access of that thing, children may have many chances to obtain or experience those negatives by themselves. Don't forget, they are still young, have no good enough judgments on what is good and suitable, or bad. Their practices can lead to harm and destroy not only themselves, but also to their entire family and society, instead of to develop and increase the quality of lives.

According to CS, a deputy director of a primary school:

Nowadays, most of our pupils, who are at ages from 10 years up, prefer to go to play computer games in an Internet café in the province, particularly on weekends. We got many complaints from their parents. I think if we got the internet here, we could teach and give them a best guidance and then influence them to do many useful and interesting lessons provided by the technologies rather than they go there alone without any good supports and care. ...

Pornographic materials such as CD, video, pictures and so on from many media, they could lead to negative impacts not only on children themselves but also the whole community. Don't forget they are kids today but they will be adults and the national human resources tomorrow. And now there are many students from high schools getting problems like this. It is a very bad thing for our society. However, the positive effects are more than the negative.

4.4.4.2. Lack of resources and facilities from government

BK, a deputy director of a high school, reported:

There is not any information and services through computer systems at school and this community because it is a rural society. Television and radio are the main sources of information providing some information, services, and entertainment to the community.

IT, a secondary school teacher, complained:

The Government provided a TV to our group of schools which has 16-18 schools. Can you imagine that 16 schools have to fight for only one TV? This is why I have to bring my computer to use in school. So, we, teachers,

are helping the Government not they helping us. Certainly, their policy stated that they want to give to us but the fact is that the supports are too small. Another funny thing is the Government wants the school to send pupils to compete with other pupils from other schools in computer skill contests in the province. How come we are capable of doing that without having a computer in school? That is why the school has no pupils from well-off families. Most of them are from nearly the poorest families in the community. The well-off families usually send their kids to study in the city.

4.4.4.3. Lack of a number of media to make up a communications network

In the mind of *BK*, a deputy director of a high school:

If we could have the computer system such as the Internet for data input and information exchange between us and the agencies ... it would be easier for us to process and communicate our information ... (but) there is no phone in the school and our village.

4.4.4.4. Lack of reliable and affordable telecommunication infrastructure

SP, a deputy director of a secondary school, said:

Due to the lack of a telephone line in school, the mobile plays a very important role for this need. If I know there is a colleague going to the city, I can ask him or her to take or send documents, letters, etc for me. Or sometime I have to help them to do that. That is I can do many jobs through mobile phone. Even if I have to pay the air time by myself, I can save my time a lot. The important thing is I can save my energy. I know I am getting old. ...

If our home does not have a road, why do we have to buy a car? It is useless. A car needs a road, it is the same that computer needs a telephone line.

According to *IT*, a secondary school teacher:

The school wants to set up the Internet for getting and sharing information. We are requesting a telephone line from the district TOT (Telephone Organization of Thailand). And the educational information and knowledge are the most important for us. Moreover, we need the delivery

of documents and reports between the school and head office in the province to be online, for instance, through a fax rather than using our car in the present.

4.4.4.5. Lack of co-operation across community, public and private sectors

CS, a deputy director of a primary school, stated:

There are not any other organizations that could help us except the school itself and the community. Because our community should depend on our people who live in this community or work in other places across the country everyone in the school, villages and temples has to help our community. You can see that the school fences and the wall surrounding the temple there are supported by the rural people here without any Baht from any organizations. We have to live on our legs and help ourselves with our full capacity, and we can't ask for outsiders' help without taking many considerations first.

PV, the director of a secondary school, reported:

At the moment, our facilities here can serve only the students within the school. It is unavailable for people in this community. Moreover, the people don't want to use our services because we are in a different of line of command. They are governed by a headperson who is under control of the TAO and the district governor. Therefore, the TAO has to take care of the development of people in the community.

4.4.4.6. Lack of support of timely, accurate and relevant data and information

CS, a deputy director of a primary school told me:

We had a long-distance radio system which allowed pupils to learn some broadcast courses, that is, English, Thai and literature subjects, through a radio network. However, the radio receivers are ok but there have been no radio programs broadcast to support the system. Therefore, the long-distance radio system was automatically cancelled two years ago. The system was quite useful for both of us - teachers and pupils in remote areas.

According to JC, a teacher at a secondary school:

They (information and services provided by current ICT-television and radio) are only basic information like educational programs. However, they are not much; most of them available on TV and radio are commercial programs or music. But I think most of the children are addicted to the dramatic programs like traditional plays and music. Not just only do children pay very less attention to information and services through ICTs, but most teachers also do that. Perhaps, some kind of information through new technological channels are quite new for us. An obvious reason is that the new technologies are unavailable for us.

4.4.4.7. Lack of maintenance, service and support

CS, a deputy director of a primary school, said:

It was aimed to set up a school language lab which provided for 20-25 pupils each time to learn both English and Thai through the multimedia system which consisted of two computers, video equipment and digital content in the form of tapes and CDs. Now the room is too old and the computers are broken. It is not available anymore. We have been waiting for assistance from many sources - Government and private agencies. ...

At this moment, all the computers in this lab don't work. One is completely gone and the other has been waiting for maintenance for nearly two years.

...

Look back at our school which was established in 1941, more than 60 years ago. Even if its location is not far away from the outskirts of the province, less than 30 kilometres, the education facilities are quite poor. One of the many reasons is that not more people could see our needs and in fact we ourselves couldn't disclose this school to people in a society.

SP, a deputy director of a secondary school, reported:

However, at the moment those computers here are broken ... (and) they are very slow and have no CD-ROM and we have no budget to repair and maintain them. The costs of maintenance and repair are high enough to buy a new one. ...

We found that some software or applications couldn't work with our new computers. The message I got is that this software is available only for

Windows 95 but our computers have got Windows 98 or 2000. So that application provided by the ministry is useless. Why did they give us such application software? It is out of date and is wasted in the school. And another problem is that some software will work only we have got an Internet connection but we don't have one. So that software is wasted on us again. There is one more problem, that there are not enough computers for the students. ...

However, the volume of IT media available to us depends on our school budget which is reliant on the number of students and the number of computers in the school. So, we have to choose an IT media program corresponding to the limitation of the school budget and the number of computers which are able to read a CD.

4.4.4.8. Lack of training and practicing

BK, a deputy director of a high school, told me:

I have been working in this school. To work with it effectively, I need support, in particular, training and the facilities which can help us to do the training. For example, I have got computers at home and school and I want to use them to support my career. I think I want to know and learn more with others about how to do better for the job. But the fact is I am locked by many limits of working in the rural area.

PC, a teacher at a primary school, said:

I think my small skills in using a word processor are not good enough to contribute to the community development but it could be useful for me to improve my skills in teaching students here. However, I need useful help and support from relevant agencies to increase my knowledge.

CS, a deputy director of a primary school: "I need more training about how to use computer technology effectively."

SP, a deputy director of a secondary school: "Lack of budget and training."

IT, a teacher at a secondary school:

We have to go to somewhere else for the training normally in the province. But the quota for each school is only one person. All teachers here want to

go but we can't because of the limitations of quota and budget. We have to try to study and learn by ourselves. We practice by trial and error. ...

One thing which I have known is that the Government provided a budget to train technological skills for one teacher per school and then they hoped that that person could train the skills to other teachers in his or her school. I think this idea is not good enough because the trained person sometime couldn't effectively transfer those skills to the colleagues due to the limitation of time. I think we should be directly trained by the experts. This is one of the weakest points of promoting ICT learning in a school. However, I know that they have not enough budget. ...

Getting enough computers in the school is our need. To use computers effectively, we need more practice. Even though we read a lot, it can't help that much. I think much more practicing in the technologies is the best way to gain its benefits.

JC, a teacher at a secondary school:

No, we never got training how to use a computer. For me, I have to learn by myself at home otherwise I am not capable of using the school computer for my work. Other teachers have to do the same.

4.4.4.9. Technological threats to social class or employment status

PC, a teacher at a primary school: "The good side is that the national budget of teacher hiring will be decreased."

However, she has never used or surfed the Internet before. As she said,

I never use the Internet. My friends always persuade me to go there but I do not dare to do it. ... This village has not had the Internet system, maybe it is my best answer telling myself that I do not dare to surf the Internet in other places except here in my village.

4.4.4.10. Sustainable projects are required

According to CS, a deputy director of a primary school:

These factors (access, hardware, expertise or intermediaries) could be enough. The main points are the constant support from the Government and a project should be long term.

4.4.4.11. Some barriers to access to basic ICTs

For *JC*, a teacher at a secondary school:

The potential benefits of computer use are very high, particularly in capacity building of a teacher. Unfortunately, the technological resources are very low. Its price is not hundreds. It is many ten thousands. We cannot afford it. The price is a main factor hampering us to reach the technology. Not only the price of a computer, we have had to consider other expenditures like a printer, paper, ink and maintenance costs and so on. We also have to upgrade it sometime. Oh, it is long term investment and a big budget. When it breaks down, we must take it to the computer shop in the city. I know we never earn anything for free. ...

Ways of using the new technologies effectively? First, a computer or technology has to be available for us. We need to practice more. Only studying from its documents or books is not enough. For me, I have to use it every day otherwise I will forget. Second is the most important. It is money or a budget.

4.4.5. Summary

Table 4.3: Summary of a SWOT analysis of induced key themes from school informants

4.4.1 Strengths: 4.4.1.1 Awareness of potential of new technologies 4.4.1.2 Willingness to help and support 4.4.1.3 Basic computing equipment are available and affordable for only some people 4.4.1.4 Some new technologies are affordable and available for most people
4.4.2 Weaknesses: 4.4.2.1 Lack of access to data, information and voice 4.4.2.2 Lack of capacity to apply the technology 4.4.2.3 Insufficient intellectual capital 4.4.2.4 Misuse of technology resources

<p>4.4.3 Opportunities:</p> <p>4.4.3.1 New technologies in local institutions</p> <p>4.4.3.2 Willingness to cooperate with among community members within and outside the region</p> <p>4.4.3.3 A community centre for capacity building</p> <p>4.4.3.4 Some initial public-private partnerships exist</p>
<p>4.4.4 Threats:</p> <p>4.4.4.1 Negative impacts of new technologies</p> <p>4.4.4.2 Lack of resources and facilities from government</p> <p>4.4.4.3 Lack of a number of media to make up communications network</p> <p>4.4.4.4 Lack of reliable and affordable telecommunication infrastructure</p> <p>4.4.4.5 Lack of co-operation across community, public and private sectors</p> <p>4.4.4.6 Lack of supports of timely, accurate and relevant data and information</p> <p>4.4.4.7 Lack of maintenance, service and support</p> <p>4.4.4.8 Lack of training and practicing</p> <p>4.4.4.9 Technological threats to social class or employment status</p> <p>4.4.4.10 Sustainable projects are required</p> <p>4.4.4.11 Some barriers to access to basic ICTs</p>

4.5. Results of a SWOT analysis of key themes about ICTs and relations between schools and local communities

4.5.1. Strengths

4.5.1.1. Awareness of interdependence of local institutions

For *SP*, a deputy director of a secondary school:

It is too difficult to develop everything in a community unless we unite the efforts of school, village and temple. Otherwise, the disintegration of community will occur and lead to a negative local political outcome which would be a great barrier to prevent the development goals. The unity of these local institutions is the most important social cornerstone.

In the stated opinion of *IT*, a teacher at a secondary school:

If three cornerstones disintegrate, where will the place be for our pupils and teenagers to go for help? There would not be refuges for our children. At the same time, if the cornerstones have social unity and closely work together in developing human resources, particularly (of) juveniles, it is believed that they will be capable and good citizens of society. Therefore, village, school, temple and other local institutions are interdependent.

4.5.1.2. Awareness of potential of information and knowledge for a better life and cooperation

PN, a member of a TAO, told me:

Not only from the email system, have I used the newspaper as my source of information as well. Our cooperation with our colleagues in this community therefore is based on accurate information. It is the first best step to reach our goals. ...

(When asked about how is the value of these ICT facilities in supporting his working together with people) *I would like to say almost 100%.*

TB, the headman of a village, reported:

There are a lot of benefits of the new technologies for both private and public jobs. I always communicate with colleagues and the officers every day. It is very useful for social or community activities. For me, it is of benefit to me and the community nearly 100 percent. It has positive more than negative effects. It is worthwhile to invest. Some families have a computer but not many. They bought them for education purpose of the kids. ...

Now the nature of working together with those people has changed a lot. There are many day-to-day activities. Sometime we have to make a decision together within an hour compared to a few weeks in the past. In the past we used a document and made a decision in a meeting room. But (now) we share information and make a decision through mobile phones and then sign a paper two or three days later. ...

Helping us to work faster and get more accurate information. ...

If we could use other technologies like computers effectively, they would help us much more by being convenient, faster and more accurate. These

benefits save our time, money, and the important thing is our energy to work longer.

It is very important to the village. For example, the government information of a guaranteed price of agricultural products - rice, sugar cane, cassava, and so on. The district always provides me with this kind of agricultural information and asks me to disseminate it and inform the local people. It is a big issue because most of our people's lives here depend on these agricultural products.

4.5.1.3. Willingness to help and support

To PC, a primary school teacher:

School, temple, and local government – TAO - are the institutions in a rural community. It is impossible to divide those. All have to work together in all aspects of development including the institutional capacity development of community. ... Whatever activities the community wants to set up, it has to cooperate with this school and the temple here. It is our norm and culture. ... So, we have to help and participate in the development of community by contributing our strong points - information and knowledge. The school also offers new and good ideas to the community; sometime we have to play a leadership role here. If we have relevant information, we always disseminate it to the people and other institutions - temple and TAO. Teachers, headperson of the village, the temple abbot and the mayor closely work together in many projects of development. We often have meetings and discuss things together. I am very happy having two roles here as a teacher and a community relation officer.

CS, a deputy director of a primary school, reported:

We bought one by using the school budget left over from the special funds and the others were donated by the money raised by the people in the community and their children who work in Bangkok. ...

Many facilities, including the computer set, here are supported by the people inside the community.

PN, a member of TAO, felt:

You know, several times there are many things happening here and we can't help the people physically. But what they want is so simple. They just want to have someone to talk to or share their problems with. Sometime they can get new ideas to solve the problems during talking and sharing ideas with me. ...

For weekdays, if the TAO computer is too busy, I always go to the school and the health centre for help. In the school, there is a photocopier which I can use. ... Sometimes, at weekends, there is nobody in the TAO. I have to go to ask Sathien or Sanith, they are teachers, to do that job (typing and printing many documents both which are and aren't relevant to my duty in TAO) for me.

JC, a secondary school teacher, told me:

*We got the computers from making a **Tod Pa Pa**²¹¹ for the school. We have a **Tod Pa Pa** every year. The last year activity, the people gave us two computer sets. Some years they bought sport equipment for pupils. We always have that kind of making merit to buy necessities for local institutions like school or temple.*

TB, the headman of a village, responded:

If you mean a computer, I cannot use it. I don't know how to use it. If I have to make any official reports, I ask the school for help.

4.5.1.4. Willingness to share, learn and know more

In the opinion of PN, a member of TAO:

The main purpose for which people purchase a computer is, firstly, they want to practice or train their children to be able to use a computer, particularly in a family which can afford this.

TB, the headman of a village, told me:

I have no idea (about how I/my community members need to be able to use ICTs/services effectively). I don't know. I think we need somebody to tell and help us how to do. ...

One day, I had to send somebody to do that job for me in the district. I am very sorry now that I missed a chance to know much useful information.

²¹¹ It is a religious activity, charity, or fundraising regarding donating basic needs including money to an organization

The information I got from my representative is not clear, not much in detail. Another example is that my assistant and I always write down useful information during official meetings in the district. I love to learn from them. ...

I discuss with the people and we have common agreement that the village development is our common goal particularly in creating jobs and increasing the people's incomes. We would like to build a village co-operative which could promote commercial activity inside the community. The problem is I have no ideas how to do this. What kind of economic activity, which could help in increasing the people's incomes or getting jobs. I have been thinking all the time. But I don't know at all. I would like to have some kind of organization which would be able to provide me with information and brilliant ideas of how and what we have to do. ...

(I need) ... an organization from the public sector which is capable of suggesting and providing us with information and knowledge, and promoting the creating of jobs or employment for the people.

4.5.1.5. Strong co-operations within a community

For CS, a deputy director of a primary school:

The cornerstone of a community is the cooperation of village, temple, and school. Parents taking care of children in terms of providing foods and clothes, giving them a healthy body; school and teacher providing education, giving them a smart brain; and temple providing inculcation, giving them a warm heart. Thus, this cornerstone can be very useful to the development process particularly in strengthening positive impacts and reducing negative things.

TB, the headman of a village, told me:

I love to work together with other people because I can gain more knowledge from them.

4.5.1.6. Awareness of community challenge for co-operation

PN, a member of TAO, responded:

If the three cornerstones of community (school, temple and local government) could closely work together, it would be the best one or the

ultimate goal for us. (However, he thought there were some disagreements amongst three local institutions.) Some disagreements between school and TAO, some teachers, only some, not all, think that a TAO gets a higher salary than a teacher. Therefore, even if the TAO has the best project to do, the teacher always disagrees and interrupts its progress.

Another example of monks, if they can work very well with people, there is a rumor that one of them is approaching a woman. Meanwhile, if they always stay in the temple and don't want to join in the village's activities, some people accuse them of being careless with people's lives and only having food there. And then some people said that we wasted our food on the temple.

In the school, if she or he is quite strict when working with people, that teacher would be blamed that she or he is not good enough to be a teacher, not as good as the other teachers in the school. In summary, the people want everyone in the three local institutions to be good people.

In the opinion of JC, a secondary school teacher:

There is a fact that the local people basically believe in data and information provided by their leaders rather than those in forms of book, magazine, leaflets, and so on. They thought those things – books, magazines, and so on - from remote sources are not related to their realities. Their contents are something which exists far away from the community's lives. Therefore, if the school has some information necessary for the people, the school has to work with the community leaders and then together we provide the people the information.

4.5.1.7. Awareness of self-sufficiency approach

AM, deputy director of TAO, queried:

How can we survive by only buying many things from others without being unable to sell our products? Can we produce or create many things to support ourselves? If we have more than our country needs we can sell to other countries. ...

One thing I think we lack is we are unable to think. We rely on the other people's thoughts. We can't think like how to live, what to do, how to do in order to achieve that our community to be able to stand on our feet. We

forget and don't realize the important of the Self-Reliance theory of development endorsed by the King. In the past, the whole community here could look after themselves quite well by looking for many things from the forest. Now the forest becomes sugar cane and cassava farms owned by a few people. There is no place for the whole people to look for foods and other necessities even the farm owners told me that they could not make any profits for few years but the debts are increasing every year. They said it is not worthwhile to do this farming any more. However, they have no idea to do something else besides sugar cane or cassava.

4.5.1.8. Some technologies are available for development

PN, a member of a TAO, reported:

When we got important and urgent information or documents from our offices and head offices in the province including from the Government, it is up to me again to disseminate those to the people through the news broadcasting centre or the sound on wire of this village.

IT, a teacher at a secondary school, said:

Apart from receiving information and knowledge from radio and television, the villagers are able to do that from the sound on wire (radio) which always disseminates relevant information and knowledge to them. However, we have a big whiteboard of information both in and in front of school. We cut the information from the newspaper. This is one of the very important channels of information and knowledge dissemination right now for our students and people because we have no chance to use other channels like the Internet.

4.5.2. Weaknesses

4.5.2.1. Insufficient social capital

In the mind of SP, a deputy director of a secondary school:

As to the current situation, I think there are not any groups, organizations or persons which devote all their efforts to contribute to the capacity development of the community because those groups, organizations and persons can't do that much. Many parts of the community are standing on

different sides of a river; there are not any devices or tools like a boat or ship available to link us together. This is the important barrier dampening down and preventing our progress in development. The government has to create the basic infrastructure first. (This can be seen as a Threat as well)

4.5.2.2. *Insufficient entrepreneurial capabilities and skills*

PN, a member of a TAO, thought:

Disagreement happens in the TAO committee as we don't invest in that business (selling foods and clothes) again because we used to do that once and nothing occurred after that. The disagreeing side didn't want to try again. I think if we don't try again by using our experiences why we failed and how to succeed next time, we will never achieve anything. If we do nothing, we will get nothing too.

SPU, an auditor of a community development project, stated:

One cause of less development in our sugar producing project here is there are not enough workers but more than 300 members. The person who had to make a decision to improve that, they didn't do. This is a cause of less development. Most of them just only wait for the outcome or profit.

TB, the headman of a village, regretted:

I would like to increase the income level of the local people. But I have no good ideas about what and how to do it. I used to discuss with and convince them to try to do fish farms. Somebody said it is a long term project and takes time to earn income. Doing a job in the morning and getting money at noon is the job they would like to do. I know that they have not enough money to invest. But now we have the village fund and the people's bank which I think could provide a source of money for the people. At the moment, I am not sure I can change their ideas. There are some successful practices of local investment from other communities but many local people don't like to do this kind of job. They prefer the concept of "morning work, evening consume". They don't want to make an endeavour.

How can I change the concept of "morning work, evening consume" of the people?

AM, deputy director of a TAO, commented:

I have experienced that most of them are unable to think creatively. I know that they can create or product something very good but it is useless if they can't sell it or make a profit from that project. They can't make a profit from the investment because they just copy some projects from other communities where their backgrounds are different from us. ...

Do you know for what purpose people borrow money from the village fund? They use the money to buy a motorcycle or a mobile phone for their children. The parents have to buy a mobile phone for communication with their kids because they work in a different province and leave the kids with grandparents. There are many problems happening because the elderly can't look after their grandchildren. It is a social problem like this everywhere now.

PK, the chief of a sub-district, reported:

I do need to help the people but I give up sometimes because I cannot convince them to work together in order to having a common success. We now are given an expert from the provincial office of informal education to develop careers for the people here. The problem is there are few people interested in this project. I convince them to join with this project but it is not successful. It is not the first time I failed in helping the people. It seems to me that they do not want to work to earn more income but they want to have money without working. That is impossible to earn more income without working hard. There are many unemployed people here. From my point of view, most people lack the spirit of solidarity in order to bringing good benefits into their own community.

4.5.2.3. Lack of technologically skilled human resources

TB, the headman of a village, told me:

I don't think so (that there is any part of the community who is able to access and use ICTs). I know every family in this community. Only a few families have used a computer in their home.

4.5.2.4. Educational and cultural barriers to access to the new technologies

In the opinion of AM, deputy director of TAO:

The problem is rural people don't like reading. This is absolutely true occurring across the nation. People, especially people in our region, never pay attention to or try to gain more knowledge by reading. I think it is our tradition. That is why they prefer to watch and listen rather than to read. Even when I access the internet, I sometime prefer watching only pictures or reading in brief to in detail. However, I have to focus on reading. I have to do that if I want to learn and know more.

4.5.3. Opportunities

4.5.3.1. Willingness to share

PN, a member of a TAO, told me:

I always receive heaps of useful information from email and the Internet. It is very good. For example, Sanith, who is one of my best colleagues, always, shares information and knowledge provided by the internet with me. It is quite often that he explains the important core of the information. When we got important and urgent information or documents from our offices and head offices in the province including from the Government, it is up to me again to disseminate those to the people through the news broadcasting centre or the sound on wire of this village.

At this point I should acknowledge that some of the evidence was used before in the (h) section of "Strengths" is also relevant for this part of my analysis and as such it is a commentary on my informant's concerns.

4.5.3.2. Willingness to cooperate with and among community members within and outside the region

PC, a teacher at a primary school, felt:

It could be very good indeed to have the facilities helping us to work together with the people. In this community, school is one of the central institutions at which teachers, parents and the people could closely cooperate in developing the future of the pupils. It is a positive trend and will be getting better than today.

Also *JC*, a teacher at a secondary school, thought:

The cooperation of school, temple, village, and TAO is vital for community development. We have to work together. If they had disagreements, it is totally hopeless to reach the community development. Village, temple and school are a community. They have to walk hand in hand in community projects. For example, in the project of drug prevention, the school and schoolchildren's parents work together with the temple to inculcate our children, teachers and parents about how to protect us from drug abuse. The three community pillars have run this project at the temple every Friday over years. The temple is our central point for all community activities. Before we start doing any projects in the community, teachers, monks, community leaders have to discuss first and then run the work together. We all work together very well. The only thing we lack is a budget.

4.5.3.3. Some initial public-private partnerships exist

PC, a teacher at a primary school, said:

School, temple, and local government – TAO - are the institutions in a rural community. It is impossible to divide those. All have to work together in all aspects of development including the institutional capacity development of community. We are only the school in this village. Whatever activities the community wants to set up, it has to cooperate with this school and the temple here. It is our norm and culture. ... If we have relevant information, we always disseminate it to the people and other institutions – the temple and the TAO. Teachers, the headperson of the village, the temple abbot and the mayor closely work together in many projects of development. We often have meetings and discusses.

4.5.3.4. Some ICT initiatives for development at provincial level exist

SPU, an auditor of a community development project, reported:

Our customers of OTOP²¹² are doing business with us via the Internet and this provincial OTOP got a big order. All our provincial OTOP products are pictured on the Internet and ordered by customers nationally. But at

²¹² OTOP (One Tambon One Product project) is the development project at village and sub-district levels in which community people create and develop their local products in order to increase jobs and income and lead to be self-reliant in a sense of strong community.

the district level, we lack a budget to do this and have not the online systems to support it. The mobile system is too costly. Our local products in this community could give us more profit if we had the Internet and a budget for investment. ...

At the moment, we don't have any information and services through the new technologies at a community level. But at the provincial level, our business activity relies on online technology like the Internet such as account trading and marketing systems including internet banking.

4.5.3.5. Some ICT initiatives for development at community level exist

PN, a member of TAO, believed:

Usually, a government agency is accessible to the Internet. This facility is a central medium to provide information to people. The Government has an urgent policy to provide the Internet connection to every government agency, such as schools and health centres. ...

As I have known the purpose is that the Government wants students, people and TAO to have a chance to access the information and knowledge. It is very simple to say the Government doesn't want the people to be stupid.

4.5.3.6. Self-sufficient community

To SPU, an auditor of a community development project:

It is obvious that our community is self-sufficient. Everyone has enough for their basic needs to survive. We don't strive for getting rich because to reach that we have to invest and pay. Our community is not too big then nobody dares to throw our resources to reach that point. Another important issue is we have no budget or money. Our people don't want to push ourselves in debt. This is a cause of lack of development. From my own experience, if we try to group people into more than 10 or 20, it is not quite successful because they are not satisfied with sharing the profit. Because of this it is very low, about Baht 200-300²¹³ per head per month. This outcome makes them be discouraged. If they are less than that number, it could work well and quickly.

According to TB, the headman of a village:

²¹³ Roughly \$ 10

However, the community has to purchase a computer for itself. Because we have to use it for our community projects such as the village fund, the people bank and the village cooperative. This technology could be very useful to these projects. Nowadays, the village has dealt with many documents and reports of the projects. ...

As I told you, the community has three development projects (the village fund, the people's bank, and the village cooperative). It takes a longer time to deal with its data both specific and general when the district wants to know some information. We make some inquiries to our project members. Sometimes we forget where we put it. Sometime it is found. But it is quite often we lose it. It is our normal problem now.

For example, most frequently questions or inquiries from the district are: the number of current members of each project or the total who didn't pay the interest within a month or a quarter of a year, and so on. I think if we could use a computer, we hope that we could work accurately and, importantly, faster. The fact is that this information is not kept with me. They are in the hands of other members because we work together with many people. But I need to communicate and inquire to them to report to the district, even our project members.

4.5.4. Threats

4.5.4.1. Negative impacts of new technologies

AM, deputy director of a TAO, told me:

However, some families in this village can access the internet. It is easier now to install the internet connection at home. Just by buying a modem card at about Baht 1,000²¹⁴ they can access the internet. For my favourite, I prefer to access a website of health care. Nevertheless, I have been very concerned about many negative things on the net. Last time I surfed and checked some information on the website of a local school in this tambon and then I clicked on something on a webpage. The thing I found there was a website of pornography. I found a porno website in the school website. This kind of website is easily found everywhere on the net. The central

²¹⁴ Approximately \$ 35

government must take this issue seriously against porno webpages within school websites. I don't know how it happened. I have no idea.

4.5.4.2. Lack of resources and facilities from government

PC, a primary school teacher, said:

As I have known, there are no other parts of the village which can access to the Internet or use a computer for storing any data or information. However, there are perhaps some families that have a computer for entertainment, not education and storing any data. If they have to deal with information, they will come to us and ask for help.

IT, a secondary school teacher, reported:

The community now lacks these facilities. They always come to the school asking for our services but in the past we didn't have enough computers to serve the community. They wanted to create and print their reports and use a computer. In fact, the school should be the service centre of the community. Unfortunately, we have not enough for ourselves.

TB, the headman of a village, complained:

I have only a mobile for all my work. I bought it by myself. The government had made a list of community leaders, such as headpersons, who didn't have a communication tool, several times because they said that they would give each of us a walkie-talkie for communication and working with colleagues across tambon and district officers. Up to now, there is nothing.

4.5.4.3. Lack of capacity support from government

CS, a deputy director of a primary school, pointed out:

However, the school and this remote village lack a telephone line. We have to use a mobile phone even though it costs us much more money than a home phone. This is a big burden in communicating with outsiders. Many members of the council have to buy mobile phones for communicating with each other and this basic tool wastes the poor like us.

IT, a secondary school teacher, mentioned:

The local people want to create and print their reports and use a computer. In fact, the school should be the community service centre. Unfortunately, we do not have enough of those facilities to meet our needs. We have just only one

computer set in a common room. If a teacher who wants to use computer for their work, she/he has to bring their own computer to work here. The community needs the facilities from the school but we can't serve them, then this is a problem that temple, village, and school can't unite to work together. Some people said that the school has a computer but doesn't want to help them. They don't know that even we now fight each other to use that. If we had computers, telephone lines and could send documents through the Internet, the school would be the community service centre. So, the cooperation among temple, village and school would be getting better and better than what we are doing now.

At this point I should acknowledge that some of the evidence for category (b) is also relevant for this part of my analysis and as such it is a commentary on my informant's concerns.

TB, the headman of a village, responded:

About the small industry in producing sugar from sugar cane, yes, we can do the process of sugar extraction. But the colour of product of the boiling process is black, not brown. Nobody wants to buy black sugars. There is no one we can ask for help and we don't know whom we can ask or learn from. Now, we are stuck with the problem. Another idea, I would like to have a rice mill for the community. We are able to buy rice from our neighbourhood and within this community. And then we could produce rice in a package and market it with some government department like the army in the city, for instance. Finally, it is only my own idea. How can I do it? ... To do a fish farm with the school, they said the people can use the school place for doing that. People and school can learn from each other to do the farm. But the current problem of the idea is lack of a budget.

UP, a TAO member, asserted:

If we could access the ICT and get updating information necessary for the farmers, we could earn more profits and prevent any kind of big losses. Don't forget most people here are farmers. They have been doing farming without planning. I know one thing why most farmers had done it without planning is because they had no information and nobody told them. Their work is seasonal farming except for animal husbandry. The valuable and updating information

could help the community especially farmers make plans to market successfully.

4.5.4.4. Lack of reliable and affordable telecommunication infrastructure

CS, a deputy director of a primary school, reported:

In the last two years, the provincial TOT (Telephone Organization of Thailand) provided four telephone lines for four homes in the entire community (two for each village). At first installation, there was one of them which couldn't work properly and its signal was not smooth, lots of noise. We reported the problem to the TOT a few times but there has been no one to fix the problem recently. Both of them have currently been gone completely for a year. ... However, headmen reported to the TOT but there has been nothing from there. Everything is silent. From my point of view, since the highest rate of many mobile phone campaigns few years ago, the quality of TOT services has dropped down a lot. It seems to me that the centre forces me to use a mobile phone from a private company rather than a fixed phone serviced by the government agency.

PN, a member of a TAO, considered:

Right now, the most important thing which can make us and our community use the technologies effectively is having a telephone line at home. If the community had landlines, they will influence us to move further on many things. For instance, I would buy a computer set at home and then set up the Internet connection because the accessibility of email system is my primary goal, not the computer itself.

The blend of a landline and computer is a basic step, but very important, of information accessibility.

IT, a secondary school teacher, answered my question about any local families with internet connections:

In this village, I am quite sure, no. Because we don't have a landline. As I told you that there would have less than 5 families which can afford a computer.

TB, the headman of a village, gave a similar answer:

I know every family in this community. Only a few families have used a computer in their home. We have no telephone line.

4.5.4.5. *Insufficient good opportunities and choices for growth*

SS, a deputy director of a TAO, believed:

General information through television and some government information are what we have got now being provided to community leaders like the headperson of the village or tambon and then they will report it to the people through the sound on wire system. For me, television is not a good channel to provide information and knowledge to the people because there are only entertainment programmes such as dramas, game shows and music. Most rural people are addicted to the things. Only a few people are interested in information provided through this media except news and information of political movements. But people in this area are much more interested in politics, health safety from any epidemics such as bird flu and SARS, drug hazards and AIDS prevention. ...

It means they are concerned a lot about their safety from diseases and illegal drugs. It is a good trend in rural areas. Even my little niece also blames and warns me that I have to be careful about AIDS if she found that I hug somebody else, even my friend, in front of her.

4.5.4.6. *Insufficient support of timely, accurate and relevant data and information*

TB, the headman of a village, reported:

The village doesn't receive any kind of information or services through technologies like computers except through the mobile of our members like mine. The information is available for us in the forms of a local government newspaper and official reports provided by the district. And then I as a community leader use those as my sources of information to talk and work with the community. ...

I don't know at all about the government policies and investment in ICT for developments.

4.5.4.7. *Some barriers to access to basic ICTs*

CS, a deputy director of a primary school, responded:

However, the school and this remote village lack a telephone line. We have to use a mobile phone even though it costs us much more money than a home

phone. This is a big burden in communicating with outsiders. Many members of the council have to buy mobile phones for communicating with each other and this basic tool wastes the poor like us.

AM, deputy director of a TAO, believed:

If there is something such as the new technologies which are available for us to support the cooperation among people and their local institutions, its value could be very high. To be honest, I am not sure that the new technology can do that because the people are still poor in education and economics. As I told you the people prefer watching to reading.

4.5.4.8. Lack of coordination across community, public and private sectors

AM, a deputy director of a TAO, said:

The government in the past may thought that ‘Khon Isarn’²¹⁵ are stupid because we are poor. That is why the central government tried to develop the career of the people here by using their own concepts from their perspectives. They told us what to do but they never thought why to do. Of course, the people can do what the government wants them to do such as producing a local product as a mass product to earn more income. The outcome is different from the government thought. People can’t sell the product profitably. ...

But I am worried about the village because rural people are always asking for money from the government office because they used to have money from us in the past. They only think to get more money but never think about how to solve their problems. So far, many community projects are initiated from the top. The government provides them with everything even to solve the people’s problems. That is why people are unable to think by themselves to solve their problems.

²¹⁵ *Khon Isarn* refer to people who live in the Northeast of Thailand

4.5.5. Summary

Table 4.4: Summary of a SWOT analysis of induced key themes about ICTs and school and community relations

<p>4.5.1 Strengths:</p> <ul style="list-style-type: none">4.5.1.1 Awareness of interdependence of local institutions4.5.1.2 Awareness of potential of information and knowledge for a better life and cooperation4.5.1.3 Willingness to help and support4.5.1.4 Willingness to share, learn and know more4.5.1.5 Strong co-operations within a community4.5.1.6 Awareness of community challenge for co-operation4.5.1.7 Awareness of self-sufficiency approach4.5.1.8 Some technologies are available for development
<p>4.5.2 Weaknesses:</p> <ul style="list-style-type: none">4.5.2.1 Insufficient social capital4.5.2.2 Insufficient entrepreneurial capabilities and skills4.5.2.3 Lack of technological skilled human resources4.5.2.4 Educational and cultural barriers to access the new technologies
<p>4.5.3 Opportunities:</p> <ul style="list-style-type: none">4.5.3.1 Willingness to share4.5.3.2 Willingness to cooperate with and among community members within and outside the region4.5.3.3 Some initial public-private partnerships exist4.5.3.4 Some ICT initiatives for development at provincial level exist4.5.3.5 Some ICT initiatives for development at community level exist4.5.3.6 Self-sufficient community
<p>4.5.4 Threats:</p> <ul style="list-style-type: none">4.5.4.1 Negative impacts of new technologies4.5.4.2 Lack of resources and facilities from government4.5.4.3 Lack of capacity support from government4.5.4.4 Lack of reliable and affordable telecommunication infrastructure4.5.4.5 Insufficient good opportunities and choices for growth

4.5.4.6 Insufficient supports of timely, accurate and relevant data and information

4.5.4.7 Some barriers to access to basic ICTs

4.5.4.8 Lack of coordination across community, public and private sectors

CHAPTER 5

ADDRESSING LOCAL GOVERNANCE CHALLENGES: SCALING UP PARTICIPATION

5.1. Introduction

This chapter is a continuation of Chapter 4 which was concerned with reporting and analyzing key themes of the study related to school and community. In this chapter the corresponding themes related to local religious institutions and local government organizations (Tambon Administrative Organizations, TAOs) are presented.

Its final section summarizes the outcomes of the SWOT analyses reported in both Chapters 4 and 5.

5.2. Results of a SWOT analysis of key themes about ICTs related to temples

5.2.1. Strengths

5.2.1.1. Awareness of potential of new technologies

IT, a teacher at a secondary school, reported that *Luang Por*, the chief monk at a local temple who provides us with the computers told us to look at this, practice this, become able to use this effectively and efficiently and then this will lead you to be more intelligent. Please use this positively and creatively, it will make you more knowledgeable. After you become knowledgeable, you have to teach and lead your pupils and people to be more knowledgeable too. And if you could do that, I would give you more of them. It is his policy and we have to make it come true. Now we, the teacher here, always remember to be able to look and see, able to do or practice, able to use it and lead to intelligence.

5.2.1.2. A community centre for capacity building

According to *CS*, a deputy director of a primary school:

Money or budget is certainly our most important need for everything, but any forms of information or communication which could help us to tell outsiders what our shortages are, are what we need. For example, there

was a meeting of the council last month to discuss enlarging a school building because it is insufficient for the new pupils this semester. How do we receive more money to do that? We decided to arrange a **Tod Pa Pa** to raise money from outsiders especially our old pupils and villagers who migrate to work at different cities particularly in big cities like Bangkok, even if some villagers who are working overseas. ... Last time we succeeded in building the library, without any government supports, by making a **Tod Pa Pa**. We also didn't pay a constructing company at all because of all the people's cooperation.

5.2.1.3. A local centre of social and cultural development

AM, a TAO deputy director, reminded me,
But don't forget that Thai society has had a temple as an educational institution for more than 700 years. That is why most people respect monks more than other community leaders, government officers, even the prime minister. That is why monks can do many good jobs than others in rural areas. They can be social activists and motivators to mobilize local people and resources for local development. In the past, people had a community meeting in a temple, not in a village or other places. Now, a TAO becomes the centre of economic development in rural areas but a temple is still the centre of social and culture development.

5.2.1.4. Willingness to help and support

IT, a secondary school teacher, told me,
The temple of Na Luang in this province provides us with six computer sets and now our school has more computers than the others in this sub-district. We have approached many private organizations, companies and other state enterprises for IT support. We can't ask for help from government institutions because, in fact, I know that they also lack computers too. They really need them like we do.

5.2.2. Weaknesses

5.2.2.1. *Lack of capacity to apply tacit knowledge for balanced development in community*

The most crucial problem, amongst many, has been experienced by local institutions, for instance temples, is that most of their human resources lack capacity to apply tacit knowledge for human development. Entrepreneur capabilities in understanding the interconnectedness among tacit knowledge acquired by the temples and other domains of knowledge such in social, economic and political arenas, is one of drawback of the local institution. “Knowledge – what we know – means little unless intelligently applied to serve others”, says Venerable Sri Dhammananda²¹⁶. This is a knowledge gap occurring in rural areas and then divides those people who live in the same area but on different world view.

5.2.2.2. *Being isolated from community*

Being isolated from community of temple is one of most social concerns in Thai society. An important cause of this circumstance is temple cannot serve community needs which have changed a lot in the changing and more complex world. Welfare or benefit of religious institutions, especially tacit knowledge, cannot be adapted and innovated and then provided by monks to make those available for people, even other monks and themselves, in contemporary society both in rural and urban areas. This has increasingly deteriorated Thai community across the nation because of lacking of the combination of necessary factors such as interdependence, coordination and interaction. According to a Buddhism concept, “there are three kinds of welfare or benefit: one's own welfare (attattha), the welfare of others (parattha), and the benefit of both (ubhayattha).”²¹⁷ A local institution, especially temple, could work better in partnership with community or society, rather being separated, if the temple itself were capable to achieve their own welfare and then to develop its capacity in attempting to provide community possible benefits through working together with other stakeholders

²¹⁶ Dhammananda, K. S. (1999), *Food for the thinking mind*, Buddhist Missionary Society Malaysia, Kuala Lumpur, p. 63

²¹⁷ Visalo, P. P. (1999), 'Buddhism for the Next Century: Toward Renewing a Moral Thai Society', [Online, accessed February 23, 2005], <http://www.saigon.com/~anson/ebud/ebdha289htm>

from state, corporate, voluntary sectors including other civil society organizations (CSOs) in the perpetual process of development. As Pra Phaisan Visalo stresses that the preceding two of welfare must “go hand in hand and cannot be separated” to accomplish the benefit of both, that is, of society as a whole.²¹⁸

5.2.3. Opportunities

5.2.3.1. A community centre for multi-layered partnerships

CS, a deputy director of a primary school:

Before having the ICT benefits, we can do many good things for school and community. I think with the supplement of these we can do better and better. The ICTs however are just only devices or supplementary things; the cornerstone of the community is the cooperation among villages, schools, and temples.

PN, a TAO member:

You can notice the monk at Na Luang temple in our province. He is one of the best monks because he can attract many people from many organizations across our region to get training there. Pupils and students from schools and colleges, government officers in nearly all departments in this province including many people in villages have to learn and practice basic moralities of how to live and work together in a society. I think to do like this could solve the problems between TAO and school, temple and village, and school and village.

5.2.4. Threats

5.2.4.1. Negative impacts of new technologies

A temple is seen as a local center of social and cultural development which aims to work together with people at school and village pertaining to provide them training needed to enhance and promote social and cultural development. Main purpose to be a priest is to practice, train, develop and strengthen his mindfulness, wisdom, concentration and insight. But using the new technologies, in order to be able work together better with community might inadvertently weaken, rather than

²¹⁸ Ibid.

reinforce, the main purpose by virtue of their powerful potential able to bring both advantages and disadvantages to the user at the same time.

Trust, virtuousness and respectedness are essential ingredients of being a priest. These aspects of social capital are very important as a means to enable them to work together with people effectively.

5.2.4.2. *Insufficient co-operation across community, public and private sectors*

PK, a sub-district chief:

I know that our democracy system is good for our country. I like it but I feel regret that most people's representatives in local government like TAO lack a good spirit to serve the people and their own country. It is very rare to find a community leader who is capable of convincing or organizing people and staffs in local institutions and communities to work together for common benefits. This is a first and main cause of the country's problems. The next cause is the lack of moral principles of people. Our community development mainly focuses on economic rather than social development.

5.2.4.3. *Insufficient government supports and services*

SS, a TAO deputy director:

Temple and community leaders such as headpersons of villages and the tambon can use computers but they have no internet connection to access necessary information and knowledge for development.

5.2.5. Summary

Table 5.1: Summary of SWOT of key themes related to temples

5.2.1 Strengths: 5.2.1.1 Awareness of potential of new technologies 5.2.1.2 A community centre for capacity building 5.2.1.3 A local centre of social and cultural development 5.2.1.4 Willingness to help and support
5.2.2 Weaknesses: 5.2.2.1 Lack of capacity to apply tacit knowledge for balanced development in community 5.2.2.2 Being isolated from community
5.2.3 Opportunities: 5.2.3.1 A community centre for multi-layered partnerships
5.2.4 Threats: 5.2.4.1 Negative impacts of new technologies 5.2.4.2 Insufficient co-operation across community, public and private sectors 5.2.4.3 Insufficient government supports and services

5.3. Results of a SWOT analysis of key themes about ICTs related to local government

5.3.1. Strengths

5.3.1.1. Awareness of potential of new technologies

PN, a TAO member:

I have to be ready for this job (community services). They don't need to hire a car or a motorcycle to come to see me. Just only phone me. They can save time and money for do and prepare other things. ...

The latest unusual events, the bird flu and SARS, made me and our colleagues in TAO, health centre, and school very busy to tell the people how to prevent and protect us from the blights. Also, sometimes we obtain the information about a new election in this province from the district and that information perhaps is not clear and not in much detail. The more detailed information can be downloaded from the email. We know more than from people who provide information in the district and can enlarge our understanding. I mean we obtain the information from many sources including the original source of it. So, the information we earned is perfect and accurate because we can take it from its origin. ...

Even if the Government had the information of the products, without the computer system they could tell us but it wouldn't be on time or not up to date. ...

When farmers can have access to the technology, we are not blind farmers any more. I feel very good when I say this because we can see our good opportunity for our community.

SPU, an auditor of a community development project:

A computer is an indispensable tool to us (OTOP). If we lack that, we can't handle heaps of information. ... However, a mobile system is also necessary to support the Internet system. If I don't have these systems, I will waste time a lot. I don't have a computer at home because I have no telephone line here. It would cost me very much if I used the Internet via mobile phone. ...

The mobile phone can serve us to some certain degree. Just only for news, not deep in details of information. Something is being hidden especially at district level even it is a government activity because of a result of high competition among government departments across country and of their benefits. You can't suppose that other officers in other provinces would tell you the truth but you can access that information on the Internet because we are forced by the Government to report our latest movements there. Therefore, lacking the Internet, it means you will lose your opportunity to earn more profit even if we work at regional level because of having few orders or lacking convenience to deal with. ...

The new technologies are convenient, time saving, and the best facilities. The importance is that it gives us a prompt action and up-to-date information. Dealing with documents and communications is able to be done without delay. It is useful and helps me a lot.

When the Internet is accessible, it is very convenient for marketing. And I am able to use English even it is just a bit. And another important point is this technology will alert people to develop their products and we are only a supporter. If we couldn't do that, we could be able to ask help from other expertise. ...

Instead of running to the province, we could do/order/communicate through the Internet. Our team works over there just only click and click on the Internet. Each knows the needs of the other person. It is fast and leaves us more room to develop our work. This is an important benefit of the Internet. Instead of knowing what happens in the province, we could know around the world. Whatever documents we need we could find them on the Internet. Laws, regulation, and procedures of how to do business inside any country in the world, are available for us there, no need to bustle for those documents. Who would be our customers including their currently needs and the trends? And where are our next or new potential markets?

BJ, the head of the financial section of a TAO:

To support our works, I think the best value of the technologies provide to us is the speed of information services. The TAO, even many government offices, take too long a time for doing their work. Just only on this issue we can understand the most important value of the technology provision. ... Of course, we could do some jobs without those facilities but please think about time, our efforts, other resources and the outcome of the jobs. We cannot work with people without knowing some relevant and basic information. We cannot walk there with blind eyes. Therefore, it is very high value if there is a supporting tool to help us work with those people. However, if we use it improperly, many bad effects of it can happen. They are many positive and negative impacts of the new technologies on our society. We have to use them properly and wisely. ...

I think computer hardware is our first priority. It is not enough for working in this office now. For example, if we have a notebook we can take it there for better training. And the others are video and voice recorders. It is useful in a meeting or training. For instance, when we got training, voice recording can assist us to review some lessons because we can't remember everything. We can listen again and again. These simple and tiny things like video tape and voice recorder are very useful for improving the effectively use of ICT.

RT, a deputy of chief of a sub-district:

At the moment, we have been running village funds. The computer system could assist us to deal a large quantity of the project documents. I want to keep or store all of them in one place. To do that will help me to easily handle and manage the documents. The new management team can learn quickly from the old team's documents. I don't want to destroy the old documents by putting them in a fire. They are public properties and needed to be kept in a good system for further using. That is why I would like to have a computer. ...

I think the technology system could help us a lot in terms of storing and managing data and information of the village funds. Normally, ordinary villagers are not interested in using a computer. Only community leaders from TAO, teachers, headperson and kamnan are interested in using the new technologies for development.

UP, a sub-district TAO member:

The TAO needs to work together with many people who are both living inside or outside of this province. So the telephone helps us a lot to communicate with those people. The fixed phone costs us less compared to mobile. Anyway, both of them are very convenient and important for disseminating information necessary to work together. However, hardcopies of documents and reports are still necessary too. The fax machine in the office is the most important tool to share the hardcopies with other people across the province, even the nation.

The computer is used to keep TAO information, though we have filing cabinets. But they cannot keep many documents like a computer does. Use of a computer for that purpose saves us a lot for office materials such as cabinets, files, containers, and so on. A diskette, for example, is able to save many files of documents or reports. ...

I think it is beneficial to develop the villages, organizations including human resources. I am quite sure that the world view of people at different periods of time is very different now between those who can and cannot access the technologies. I think our world view is quite different from the world views of our grandparents and parents. And I am sure that people in the next generation will have a very different world view from us. They could have chances to see, hear, and experience many things widely. There is a lack of many good tools, both equipment and human resources, to help us in development. However, there are many negative impacts of the technologies such as wasting money and somebody using it in wrong ways.

...

As a TAO member, my possible help is, for example, I can support or introduce a computer technician to them (local people and institutions) in training and learning. Oh, I think the computer can help us not only to save time, money, office space, but also to minimize our cost in human resource development.

SS, a TAO deputy director:

The provision and accessibility of ICTs will be very important to the future of our society by starting with our children right now. Therefore, in the next 20 years there would be nobody who lags behind in the information age. ...

The new technologies like the internet can promote not only the education of children at home or school but also the working in an office like a TAO. We need the internet to support working in order to increase the speed of our work and service and become a modern government office. Sometimes I can't answer people about many things because of lacking information to support. I feel not confident to work without good supportive information. The concept of human development, particular in new public management,

has been changing a lot but if we have the internet we can learn it from there. The internet is our most important information need because it can serve me with many government information and services. It can help me at once if I want to know some information provided by the central department - the Local Administration Department in Bangkok. ...

If I could use the internet in the office, I can work efficiently and confidently especially to work with the people in the community. Its value is very high. ...

The government wants to improve communication and establish electronic procurement systems by using the internet among government offices in order to prevent or reduce the corruption occurred in public sector.

5.3.1.2. Awareness of the significance of building people's capacity

BJ, the head of the financial section of a TAO:

For information dissemination of the Government in order to improve the quality of people lives. It is a learning process in itself. It is another channel of learning besides newspapers. I will tell you something. A newspaper is unavailable for you even you can afford it. There is no news agency here because of the high expenditure for transportation and low density of population. So, if you want to buy the news, you have to go to the district (capital) by yourself. How can we do that because of the high price of petrol? At the moment, I read the newspaper once a week. What about the other people here? What about their learning, knowledge and something else?

I think information is the most important for people's learning here. Even though the development of technology is so good, it is useless if we cannot use it. It doesn't matter how good an idea is from the Government or somebody else. It is still useless if it is unavailable for Thai citizens.

RT, a deputy of chief of a sub-district:

The value of the technologies is their convenience and useful in working. They save our time a lot to communicate with our people and colleagues. And the important thing is I am able to finish and give the district reports

on time. Sometime we only need talking and explaining our works through the phone, the job is done.

In the past four years before I got the mobile, I had to run my job for 11 villages of the sub district by using a motorcycle. It was not fun to collect and share what information we needed to talk, explain, and work with 11 villages. Now, I feel more comfortable to do the job and the importance is we got our job done well and on time. ...

Getting more convenience in work is a value of the use of the facilities. It could be very high because they are able to reduce many difficulties of works and increase, at the same time, the quantity and quality of them. Just only the saving of time and petrol for a car is more than enough. ...

So far, the people are quite interested in political movements. They have many opportunities to know, learn, and follow the political activities of their own MPs. In the past, we only heard them through a radio without having a chance to follow and monitor their activities to help us closely. It is totally different now. People learn a lot and become smarter. Television and communication technologies like a mobile phone helping people in disseminating or sharing information and knowledge as well as learning from the others.

ST, the chief of a sub district:

The new technologies are suitable for the new generation but I am an old generation. I heard it benefits other people especially students and people in the district. It is possible to me to go for its training. Everyone is able to learn all the time.

(c) Tacit knowledge exists in the local community

SPU, an auditor of a community development project:

In fact I have planned with the people to set up this village to be an OTOP centre in this tambon. And the village will take care this. I really know how to do that but I can't do it because of lacking the facilities. When I worked as the secretary of OTOP at tambon level, I experienced the causes of unsuccessful OTOP projects. One was that a structure of salary and

benefit was not clear. It couldn't influence people to do this compared to do other jobs.

BJ, the head of the financial section of a TAO:

Data and information about local financial are our needs. When we get a budget from the central government, we have to know how much money we put into our projects and programmes which cover four aspects - general management, social and community services, economic, and other services. The effectiveness of financial management for those programmes is our aim. However, improving and using the Internet and computer in this office are also our technological needs.

The regional and national departments are able to see and check our progress in working on many programmes based on our data and information about which project or program has good success or not. I think this information is very important in budgeting and is reported to the admin committee for further planning and making decision.

Another kind of information we need is about the procurement system. For the best quality of work, TAO raises a high competition among many contractors who want to bid for works in this area. So, the procurement could be processed on the Internet which leads to the transparency of local government activity. We hope that to do so will prevent corruption in the procurement process. The online announcement of procurement is one important tactic of creating the transparency. ...

I think it could be beneficial for the people in the community especially the market information. Today, a local government has its own authority to collect tax and income from many sources within its community. So the local government has to develop all activities for economic, social, and political life. We are a self-governed organization. Our primary aim is to increase people's income or reduce the poverty of the people. Job increasing and career promoting are also our central goals to provide our budget appropriately. I understand that it is useless we provide budget for the purposes if we don't know our potential markets. Career promotion has to go along with finding potential markets.

ST, the chief of a sub district:

A leader is an important person to work as a people's representative. A leader is a tuber of community development. Our people are the stem and leaves. A leader has to absorb many kinds of knowledge and information and then disseminate them to the people in order to be able to work together well with them. That is why I think a leader is one of the greatest necessities for local development. So, the well-being of community mainly depends on the leaders and their roles. ...

They (school, temple, community leaders, TAO, and civil society) are very necessary for community development. A school provides good education to the community members, particularly children. Teachers are educated people in the community. The temple's responsibility is to inculcate the people at all ages the values of being a human. So, a school and temple are a community source of knowledge. People should be guided by the knowledge for living. If there is no cooperation among school, temple, and village, we cannot survive. Having much of money is not good enough for a community survival as long as community violence still exists. That is why community members need some kind of knowledge from school and temple. So, I'd like to repeat that the cooperation among school, temple, community leaders - headperson and kamnan, TAO, and civil society is the most significant ingredient of community development. And all of us must share benefits and work together sincerely and openly. ...

The poverty is the foundation of all problems of our country. A family wants to make more money so the husband or wife has to find a job in another city and leave his family in the rural area. The problems of the family begin to occur. Their own children have a problem. At some point, a chain of family problems is complete and then they scale up to the next levels of problems, i.e. of community, society, and the nation. For example, from that point if the family has their grandparents, they have to look after the kids. Some grandparents are very old and poor but they must take care of their kids. So, they get more serious and health problems. The cause of problems is poverty.

5.3.1.3. Willingness to share

SPU, an auditor of a community development project:

... I have to find an expert officer in this area to guide and train us and then get photos of them on the Internet. I would like to use my experience of working in the provincial and regional offices to serve the people. You know it is my dream. Could you help me to reach that?

RT, a deputy of the chief of a sub-district:

Sharing knowledge with those people is my favourite. I usually have a meeting with the people as the kamnan representative. Any beneficial information I got from there, I have to explain and talk to the community leaders as well as people what they are and then we share our ideas about them. I think I am a good messenger.

5.3.1.4. Willingness to help and support

SPU, an auditor of a community development project:

I would like to help the villagers to design 2-3 products at the best we can do. ... The people will have a big awareness to participate in development process because they could earn money and increase their income. And I myself would not be tired in coordinating with many people or other officers.

BJ, the head of the financial section of a TAO:

It is quite often that some villagers like the headperson and even some ordinary people come here to use our facilities or ask our employees to produce their works. It is normal here.

5.3.1.5. Willingness to co-operate

SPU, an auditor of a community development project:

I'd like to work with the people and deal with the real local products in this village and dream to lift the product status up to the same level of the region. It must be the products of the whole community, not belonging to one person. I want to see a group of people working together and achieve

in their goals. When the Internet is accessible, it is very convenient for marketing.

RT, a deputy of the chief of a sub-district:

If temple, school, and village cannot work together well, the outcome is only the disintegration of a community. All local institutions have to cooperate in community development; otherwise we cannot reach our development goals. I would like to say we are partners in the development. Besides the partnership of temple, school, and village, the strength of community leaders must exist.

For me, the TAO is not a community. It is a local government which has to take responsibility in some aspects of community development. But our community is temple, school, and village. These three pillars are inextricable parts of community. We always work together and share our resources very well. Here, its economic status is not quite good. It is difficult to earn more money or income. That is why in the past few years there were a very few men living in the village. They went to work as labourers overseas. But now some of them come back because of the Government projects like the village funds which helping them to create and develop their careers at home.

UP, a TAO member of a sub-district:

We have walkie-talkies available to connect us with the officers in district and province. It is our luck that we have those. And I am satisfied. But I think the most current need, for all of us here, is to have an officer or whoever available for us who knows something far better about the computer itself or its contents. Of course, we want the technologies but we do need that kind of person much and much more than the technologies. I need the person who knows more than I do now. I know my own capability and limitations very well. This is the most need the villages including me do need to help us to achieve a development success. ...

I mentioned before that we have everything such as a fax machine, communication tools, and computers. I am satisfied with that. But I know the capacity of our community very well. I think we need someone, not the

technology itself, who is expert and has vision to use something far better than those technologies. It may be a person who is expert in financial management or in other development areas from the city.

5.3.1.6. Basic computing equipment is available to some extent

PN, a TAO member:

We are able to use email and fax for document delivery.

BJ, the head of the financial section of a TAO:

I use walkie-talkie, computer, and mobile phone. The oboto has four computers and one is for the internet connection provided by the Government. They are connected now as the office networking. ...

In general, there are many people who can afford a mobile phone for basic communication. And every government institution is able to use and access the technologies. The problem is that how many of technological devices – i.e. computer - do they have and how can those people use them effectively? I think it is the issue. However, most ordinary people bought computer to support their kids' education.

RT, a deputy of the chief of a sub-district:

Besides the school using computers, TAO also does in its office.

5.3.1.7. Internet access is available for some local government offices

AM, TAO deputy director:

I can access government information and services particularly the information of the Department of Local Administrative through the internet. The department provides most information to TAOs through the internet across the country.

5.3.2. Weaknesses

5.3.2.1. Lack of resources and facilities from government

RT, a deputy of the chief of a sub-district:

I have a mobile for working both at home and office. We do not have any computers here. The Kamnan has a walkie-talkie to communicate with

other government officers in the district. Every headperson in a village has got the radio provided by the Government for sharing basic information among headmen, kamnan, TAO members and the officers. ...

I want to get and use a computer for working in this office.

I need a computer and the internet connection in the office. If we had the internet connection, a telephone system is available for all of us. So we are able to communicate with other people by using the office phone rather than our own mobile. The office has to provide this facility to us. We cannot afford to pay our own money for public works. It is not fair.

ST, the chief of a sub district:

I think training could make us capable of using the technologies. However, many of my colleagues got IT training courses in the provinces and they had the IT certificates, they now get back here with the documents and still work with their old walkie-talkies. They have no chances to use a computer in offices. There is no computer there. I don't understand what the government's purpose was. Just waste time and money. You know, they let my friends look at the computer screen for a whole day and then gave them the certificate. That is all. They told me that they had no chance even touch the computer. ...

*We made a **Tod Pa Pa** for school computers by collecting money from public especially our people who work in other cities. ...*

SS, a deputy director of a TAO:

This TAO has used a normal typewriter for many years. It is not an electric one because we have just had electricity for only a year. ...

There are no ICT facilities here. No computer. No telephone line.

5.3.2.2. Lack of technologically skilled human resources

PN, a member of a TAO:

Perhaps they think that only one staff from each TAO would be enough to help other staff in a TAO deal with its information and communication needs through the email system. And an officer in the head office told me that only one person would be enough and after he or she got training, that

person could teach and train other staff in his or her TAO how to use the system. The fact that that person doesn't have enough time to do that job because there are many jobs they have to do. ...

It is a pity that we have only one person who can use the system. ...

It is quite difficult to find any groups or individuals inside the community that might help us to develop the people's capacity because they lack information and knowledge to do that. For example, there are some people like Nark who is smart in using and managing a computer system. But he can't stay here, he has to escape from this village and go to work in Bangkok. This is our problem. Whenever our Internet system is broken down, we have to send it to the city to fix it up. Our teachers in the school can fix only small problems.

UP, a TAO member of a sub-district:

Every TAO member has no chance to use it because we don't know how to use it. They are being used by the TAO officers there.

5.3.2.3. Lack of entrepreneurial capabilities and skills

AM, a deputy director of TAO:

I saw some career development projects for the local people to produce local products - OTOP products - but they couldn't find the market for the products. I think we lack managerial skills in doing business. There are commissioners of the Decentralized Committee from Universities, the Central Government Bank, Ministry of Finance, and the World Bank, who are important creditors, come here to ask me how the TAO uses the budget. When I talked and discussed with them, I knew that we lack skills in doing business especially in marketing. The current problem is not an issue that we can't produce or create jobs for the people. In fact, we can do that very well but we can't find the market for the local products. ...

We know what its (ICT) benefits are but it is only what we know. But we don't know why we have to do this and how to achieve it practically.

PK, the chief of a sub-district:

Sadly I have never found the mayor of the TAO coming here to participate in community activities with us for four years of his term. But I cannot criticize him and other TAO members a lot because we are close cousins. I think it is unfair to the people who vote and support us as their representatives. This shows that we lack something called the spirit of leadership. I heard that they had been trained many times in the city to be a good leader. How much money did we pay for those trainings? How much time did they have spent on that? Why did they not use the skills to help the community and people?

5.3.2.4. Insufficient intellectual capital

BJ, the head of the financial section of a TAO:

In fact, we could do both - infrastructure development and capacity building - in parallel. However, I accept that we forgot the concept of people's capacity building. It is possible that our vision in development is still narrow. We see only one aspect of development – building basic infrastructures. Moreover, it concerns me about the knowledge of all members of local community and their institutions. Perhaps we have seen only a road and overlooked the development of people's livelihoods as well as their capacity.

Perhaps building a road is obvious. Meanwhile, giving trainings to the people in many areas is not clear and is slow in progress to many people. I know that we lack a good follow up and evaluation system. We have supported and promoted a project of career development but its outcome is quite poor. Of course, they got knowledge after finishing the training course but they still cannot do anything because it is not a fully integrated system and lacks other resources like money. The big issue is each village focuses on their own benefits, such as the political aims of TAO members, but cannot see the whole view of our community needs. ...

We as TAO officers don't know how to promote people's livelihoods. There are no specialists to do this kind of the jobs here. ...

We have a budget to help the job but we don't know what to do. I don't know how to do it. I don't know why the Government wants us to do it. The community development department knows what to do and how to do it. They know a source of trainers is necessary to help people in career development. I don't know how to keep this job working well to help the people. I tell you just only one issue about people's career development.

ST, the chief of a sub district:

They (TAO officers) never hire the community people to work in any TAO projects. They have overlooked their own people's capacity. They never care about the quality of people's lives. They never create a job for the people. Never! They only involve building contractors or companies from the city which are already rich, not the poor in their community. The TAO has to know that in fighting against the poverty of people we have to increase income and reduce expenses of the people. To do so, creating a job and enhancing knowledge of the people are our possible strategies. Their expenditures on foods and household utilities, for example, can be reduced by giving them a proper training and knowledge for self-reliance in the community. To gain that success, school, temple, community leaders, TAO, and civil society have to work together and help each other.

UP, a TAO member of a sub-district, in response to: "What information services would you or your community like to have?":

I don't know and am not sure. Having a mobile and a walkie-talkie to communicate with other people and government officers is enough to me.

5.3.2.5. Insufficient social capital

SPU, an auditor of a community development project:

*In fact, this project will encourage the people to get in and use it. But if we get involved there, they will tell us that it is **Khongluang**²¹⁹. Only a government officer can use that facility. You can't use that. If you want to know something, tell them. They will find it for you. They don't know*

²¹⁹ In Thai, a term used for anything, usually materials rather than living things, in order to indicate that it belongs to the public or the country, not privately or personally.

whether we are able to use it or not. If you are not an officer or a member of that project, you couldn't touch it. I am lucky because I am a member of OTOP. I can use it but I don't want to. ...

They used the label of 'rural development', and told us about it by themselves. This is that. This is not. Go/be there. Do this/that or don't. However, I am not sure what they will exactly tell us there, in the Tambon internet. I don't know. This is a gap sure. A government agency shouldn't think that the local people are stupid and not want to give them what information they need. Providing information to people is very important for a government agency so it has to do its best. Usually, people have no guts to ask for help unless they have to ask because it is necessary to do so. But when an officer tells them off, they will run away and not want to get back anymore. It is so common everywhere. ...

The more organizations or groups of people take charge of a single job, the more problems and gaps would arise. If they select the people, the people don't know about the technology. Currently, it is not useful because the people couldn't take benefit from the project. I myself never use that, not because they are not good persons. I heard that it is not fair for people. For example, the charge of the photocopy service there. Some paid Baht 1.00, some only Baht 0.50, or some got it free of charge. It is a gap. Perhaps, I am anti-TAO.

AM, deputy director of a TAO:

The government thinks that one suitable way to promote the education level of people and lift the nation's status forward is to provide them with information and knowledge by using the new technologies. The government wants people to be educated and smarter. But how to achieve the goal I don't know as long as their stomachs are still hungry. ...

It is useful to a TAO to access the government information such as development policy. However, most TAO members don't understand many development terms and rules in a local government. TAO members are the local people who are elected by the people inside the community. Most of them need many supports from TAO staff to assist them in managing many develop projects. Meanwhile, TAO staffs need strong supports from the

central government in terms of available resources such as budget, information (laws, policy, services, and etc.), and knowledge to help us to help TAO members in developing their community or preventing the community from any threats such as a drug problem of juveniles.

5.3.3. Opportunities

5.3.3.1. Some development initiatives at provincial level exist

SPU, an auditor of a community development project:

We would like to improve the community trading to partly use the account trade. It depends on a type of our products. Now we work with the Kahakit²²⁰ to consider whether what is a community product could be put on the account trade and how to support or work with the local people to do that. If the community has not enough budgets, the Kahakit will take care of that job for this initial period. In addition, the agency provides information, knowledge and training to us.

AM, a TAO deputy director:

To deal with many local problems, this province asks every TAO to formulate their own community plan to tackle the problems. The province hopes that a community plan outlined by the people inside the community perhaps is one of the best solutions to govern and look after themselves rather than a plan formulated by the top.

5.3.3.2. Some public-private partnerships exist

BJ, the head of the financial section of a TAO:

The other organization which may be valuable to the community is an international organization. For example, PAN (PAN Asia Networks) helping us by providing a pupil education fund in this sub district. PAN also helps people in building a big container for water storage.

²²⁰ A district agricultural agency is the government agency which is responsible for community products within its local area.

We work cooperatively with PAN funding some projects like IT training for teachers in the school. This is the only International organization to work with us so far.

5.3.3.3. *Some ICT initiatives for development at community level exist*

BJ, the head of financial section of a TAO:

We have the household tax system installed in the computer here but we use a diskette for its data sharing with the head office.

5.3.4. Threats

5.3.4.1. *Negative impacts of new technologies*

AM, deputy director of a TAO:

There is a number of children who surf the internet who have suffered from sexual abuse. And the number of casualties of this problem is increasing. This is a consequence of economic development without concerning the developments of human and society.

5.3.4.2. *Lack of trust from local people*

AM, deputy director of a TAO:

I used to give recommendations but the TAO council and community leaders didn't believe in my ideas. I understand that people still have negative attitudes to government officers. In fact, the concept of a government officer was changed from the boss to the supporter but the negative attitudes of the people still exist in our society. It was true that a government officer was the boss but it is now not true. We are just only supporters in their local government office.

5.3.4.3. *Lack of resources and facilities from government*

PN, a member of a TAO:

The telephone system being used here is not landline. We use the 042 system, not a wire connection. This system is not stable enough to support the Internet connection. Yesterday it was not good but it is ok today. When

it doesn't work, it is impossible to communicate either by email or fax. Last time, the phone had not worked for 6 months.

("What are the office's ICT needs?") Telephone line and computers.

SPU, an auditor of a community development project:

The OTOP at sub district and village levels can't access to that because of lack of landlines.

SS, a TAO deputy director:

We don't have the internet connection because there is no telephone line in this office. Lack of a telephone line makes us unable to access up-to-date information necessary to support day-to-day administration here. It makes me uncomfortable to do many jobs especially for communication with other people. ...

Working without communication facilities such as telephone and the internet takes time and costs me a lot to consult with colleagues in the provincial office or in other provinces because I have to pay the phone bill by myself. Even though I can't afford it, I have to pay it sometime otherwise I can't run my job here. Every staff has to pay the phone bills by themselves in working here.

5.3.4.4. Lack of reliable and affordable telecommunication infrastructures

BJ, the head of the financial section of a TAO:

We have the problem of Internet connection because its speed is very slow. We have no landline but use the wireless.

I think computer hardware is our first priority. It is not enough for working in this office now. For example, if we have a notebook we can take it there for better training. And the others are video and voice recorders. It is useful in a meeting or training. For instance, when we got training, voice recording can assist us to review some lessons because we can't remember everything. We can listen again and again. These simple and tiny things like video tape and voice recorder are very useful for improving the effectively use of ICT.

ST, the chief of a sub district:

The tower of information broadcasting in the village has played an important role for disseminating information to the people. Therefore, if many resources of information and knowledge were available to us and people had a chance to learn, the technologies could be important equipment to assist us to be more educated. The tower of information broadcasting will have many kinds of information which could be provided to the people. ...

I have received more than 90 percent of information from the district so far. The district office need us, such as headperson and sub district officers, as information disseminators for the local people. And the other source is radio. For example, "The PM meets with the people program" which is the weekly radio program on every Saturday in which the Thai PM reports the progress of the country's development at all aspects. He clearly, precisely explains what is his vision and goal to administrate the nation. The program has been run by him for nearly four years. Never stopped. You know, we can know people whether he or she is good and smart in doing anything or not through giving expressions and showing their ideas. From my point of view, the leadership of leader is very important to run any kind of organizations ranging from a family to a nation.

5.3.4.5. Lack of co-operation across community, public and private sectors

SPU, an auditor of a community development project:

Something is being hidden especially at district level even it is a government activity because of a result of high competition among government departments across country and of their benefits. You can't suppose that other officers in other provinces would tell you the truth but you can access that information on the Internet because we are forced by the Government to report our latest movements there. Therefore, lacking the Internet, it means you will lose your opportunity to earn more profit even if we work at regional level because of having few orders or lacking convenience to deal with. ...

Because we don't have that information. They, other OTOP in different regions or customers, are our source of data and information. It is our

need. And this could create gaps in community development. The new technologies thus have to be set up in remote areas in order to reduce gaps and help all of us in the development process. ...

I think I am not interested in the computer caring project

Why?

Even if I proposed my projects, I never got anything back. I requested many times. Perhaps, our project is not important or there are not enough computers. Most of them are given to schools rather than other organizations. ...

Yes, they partly help us but mainly focus on building a road or infrastructure, not human resource or human capacity. Every year they use budget and time to build and maintain a road. The real goal of development should be aimed at human capacity building. However, they have started in the educational area by concentrating on pre-primary school students. I can't tell you that much because I don't know more details. As far as I've known, I am not happy with that. Without having some interests, they don't want to develop. I think they can't use the budget effectively. A good thing is all of us, including TAO members, realize that the people who are the projects' members will not lose the money, just lose only its profit at the worst.

And I need them to develop people's occupations. But they are not serious about this aspect. If we succeed in developing this, people won't need to go away to work in different provinces, even big cities like Bangkok. I want to go and participate in TAO development processes and solve these problems. Perhaps, I don't know the real problem inside the TAO. ...

In fact, village, temple, and school have many roles and important value in development processes, not might have. The village has major roles for this. The temple is a centre of people's cooperation among local institutions - school, village, and TAO. School is the second home of our children. Teachers are our second parents. The problem is how to promote these local institutions so they can work together effectively, not increase more gaps among us. For example, the school has this idea. Meanwhile, the temple wants to do something differently from the school. The people in

the middle then get confused about which way they should follow. Therefore, they have to cooperate in development processes. Anyways, I am not quite sure whether our community has any projects or participatory programs in development processes among those four local institutions. I think it has but I have no chances to join with them.

BJ, the head of the financial section of a TAO:

We as TAO officers don't know how to promote people's livelihoods. There are no specialists to do this kind of the jobs here. I think those who are working in the department of community development, for instance, whose jobs focusing on career development, should do this job rather than TAO officers. I know that the central government transferred some jobs, such as the centre for child care development, from the department of community development to us to take responsibility in community development. The child care centre has its own office in this community but didn't cooperate with TAO. We have a budget to help the job but we don't know what to do. I don't know how to do it. I don't know why the Government wants us to do. ...

For the private sector, I haven't seen anyone of them want to assist in community development. I see one thing, that people in this community have to work as a group to help each other rather than to wait for a hand from private organizations. And I think the Government alone cannot give the people every thing. ...

I think all local institutions such as TAO, village, school, temple, and health care centre have to work together. We cannot be separated otherwise we are unable to reach our goals in development surely. The school gives us good education. The health care centre looks after people's health. Meanwhile, the temple provides people with codes of conduct needed to live and work together peacefully. The TAO is the source of a budget supporting and promoting activities of other local institutions and people. However, because the TAO, school, temple, and health care centre are under different departments, the TAO cannot directly use our budget in developing or improving the school's library or building a structure in a

temple. But we are able to promote pupils' good health such as a school project of lunch and fresh milk.

Even though we know problems and needs of the local people and how to solve those very well, we are unable to do anything to intervene in other government departments' agencies to do what we should.

RT, a deputy of the chief of a sub-district:

I have worked with the department of community development over years. Most of our works have to join with the department. We closely work together more than other organizations, even the district office or TAO.

ST, the chief of a sub district:

For example, at the moment if I want to print or copy any documents to work with people, I have to go to the district (capital) and pay the computer shop to do that. Don't forget, there are many documents of many projects occurring in this village, such as the village funds. So, if we had the facilities, it would be very good.

We can't use the TAO's computers. They are only available for the TAO officers. We are under different government units. I have to go to the computer shop for dealing with my office's documents. ...

So, I'd like to repeat that the cooperation among school, temple, community leaders - headperson and kamnan, TAO, and civil society is the most significant ingredient of community development. And all of us must share benefits and work together sincerely and openly. What is happening now in the TAO? We elected them as our representatives to bring or create well-being for the whole community but now they become strangers to us. We don't know what they are doing now. What purpose? How to do and make a success happen? A budget provided by the government is a community budget. But now it belongs to the TAO, not the people. I am not sure whether the TAO understands the aim of central government to fight against poverty. Whose poverty we have to fight against? Whom we have to work for? I am not sure they know well. This has made our country behind other countries in many aspects.

UP, a TAO member of a sub-district:

When you talk about a government policy or program, I don't understand. When you ask this question, I see nothing. You push me into darkness. I don't know for what purpose the government does invest in many projects. For example, when I use my mobile which has its infrastructure invested in by the government, I am not quite sure I am doing something that the government wants their people to do. Perhaps I am doing something different from the government's aims. That is why I don't understand and then cannot tell you what it is. ...

I don't know other groups/organizations/business/individuals that might be valuable and able to work with us for community development. There could be somebody else who is capable to tell us about this. For me, I see only the district office.

5.3.4.6. Lack of support of data and information

SPU, an auditor of a community development project:

Here there is not any information and services provided through ICTs because I don't have that technology.

BJ, the head of the financial section of a TAO:

Accessing and sharing data and information stored in the province and the central are my needs. If it were able to get online, it would be wonderful. ...

One big problem we are experiencing is the waiting for any government documents from the central or provincial departments down to district and sub district. It takes time and sometime it disappears on the way heading to us. It is a cause of ineffective management. It is the same token; our financial report takes long time before reaching the provincial department. ...

The information about basic needs of people in this community should be collected as an important input of the development process. What are people's needs nowadays? I think any kind of information which could help people to earn more income are their information needs. ...

The Government information and documents about their policy, legal framework, budgeting policy given to a local government should be available for use on time. To get those in advance gives us more time to prepare our resources like human resources, to plan to work together with other organizations, such a school, and people.

I agree that there are many good things we can learn from those online contents such as the market price of any materials we need to know for our procurement information system before making any decision.

ST, the chief of a sub district:

(“What sort of information or services could be provided to you through ICTs?”). Not at all. ...

Don't forget the most valuable ICT equipment which is currently being used as an information distributing tool in rural areas is television. I think we receive information you mentioned earlier through TV up to 99 percent. Because every family has a TV set. Unfortunately, most TV programs shown on this channel are about dramas.

SS, a deputy director of a TAO:

I have to ask some information such as about a procurement system from a neighbouring TAO. This is a problem to serve our staff and TAO members including people in this community. The TAO activity dealing with information and communication lags behind other TAOs in this district. ... I need government information and services for development, for example, budget and government policy regarding a TAO's policy, task and responsibility. The latter is not clear. I heard the government announcement from TV and friends. They are just only short words. I am confused that there are many local activities from other local government departments that have to come under the administration of TAO but I can't see clearly what the local activities are. Everything is only a concept. Something is difficult to implement because of lacking precise information. I roughly heard from TV news and friends from other TAOs that the government wants a TAO to do this project, to do that. It is not clear to us.

From my point of view, I am not sure what the central government wants a TAO to do for the people in the short term and long term. ...

It is not clear and very difficult to implement. If the government information is not clear and they want us to communicate to local people with vague information, it will be doomed to failure. Don't forget a TAO is the government department which is most close to the people in rural areas and we can't run away from our responsibility. The outcome of the use of misinformation can lead to distrust of the people and then it is very difficult to us to get collaborations with them in a local development project. ...

It is quite often that I can't provide the people with information or answer them when they come here for more details in a government project. It is ridiculous the local government department doesn't know and understand a government development project in local areas. There are many government projects being launched by the central government such as drug prevention, poverty and corruption alleviation but the local government department doesn't understand them in detail nor what activities and mechanisms a TAO has to establish or follow. I used to ask this question to the district officer. They also said, "I don't know."

5.3.4.7. Lack of maintenance, service and support

PN, a TAO member:

Last time, the phone had not worked for 6 months. We reported that problem (the 042 system has not worked) to the TOT offices at district and provincial branches. Nobody came to fix it.

RT, a deputy of a sub-district chief:

I understand that the Government wants to develop the quality of people's education. Having good quality of education, people can help themselves a lot. For this community, I have seen only the project of PAN in promoting and supporting the school activities by providing computers and IT training courses for teachers. Sometime I think I cannot wait for the Government's help. I will perhaps go to get training from PAN and then buy a computer for more practice.

5.3.4.8. Lack of training and practice

PN, a TAO member:

One more thing that I need the TAO to have is that I want the staff to get training or studying. Now in the province, our head office needs a staff member in every TAO who can use the email but it is only one person. ... It will take time for training and, conversely, we are not able to send more staff to get training because we have many works to do. ...

SPU, an auditor of a community development project:

To be able to use it effectively in the new technologies, we need to practice and touch them, not by only learning or looking at them in a paper. ... I think I have many good opportunities to work together with the people here. However, the first thing I have to do is to develop my own capacity. I think we have to be sure that we know what we are doing quite well or we could do and would be able to reach a success and then we encourage people to participate in. Otherwise, I couldn't work with them. There were some projects which were led by the village leaders to some degree. They were not successful and cancelled finally. These experiences I gained from working and studying in this province many years. We have to be able to help ourselves or be stronger before give a hand to others. I disagree with heavily Mobilizing only some resources like money without promoting and developing the capacity of people in organization or community.

5.3.4.9. Socio-cultural/political barriers to access

SPU, an auditor of a community development project:

It could be very important unless the information is only half-truths or is partly disseminated intentionally. If so, we couldn't get benefit enough for achieving our goals in development. It is not that much. Most current researchers focus on the benefits for rich people who are in cities or rural areas because this new technologies mostly are affordable by the rich, not the poor. And then they don't know what benefits should be available to the poor, including what they want.

5.3.5. Summary

Table 5.2: Summary of SWOT of key themes related to local governments

<p>5.3.1 Strengths:</p> <ul style="list-style-type: none">5.3.1.1 Awareness of potential of new technologies5.3.1.2 Awareness of the significance of building people's capacity5.3.1.3 Willingness to share5.3.1.4 Willingness to help and support5.3.1.5 Willingness to co-operate5.3.1.6 Basic computing equipment is available to some extent5.3.1.7 Internet access is available for some local government offices
<p>5.3.2 Weaknesses:</p> <ul style="list-style-type: none">5.3.2.1 Lack of resources and facilities from government5.3.2.2 Lack of technologically skilled human resources5.3.2.3 Lack of entrepreneurial capabilities and skills5.3.2.4 Insufficient intellectual capital5.3.2.5 Insufficient social capital
<p>5.3.3 Opportunities:</p> <ul style="list-style-type: none">5.3.3.1 Some development initiatives at provincial level exist5.3.3.2 Some public-private partnerships exist5.3.3.3 Some ICT initiative for development at community level exist
<p>5.3.4 Threats:</p> <ul style="list-style-type: none">5.3.4.1 Negative impacts of new technologies5.3.4.2 Lack of trust from local people5.3.4.3 Lack of resources and facilities from government5.3.4.4 Lack of reliable and affordable telecommunication infrastructures5.3.4.5 Lack of co-operation across community, public and private sectors5.3.4.6 Lack of support of data and information5.3.4.7 Lack of maintenance, service and support5.3.4.8 Lack of training and practice5.3.4.9 Socio-cultural/political barriers to access

CHAPTER 6

ANALYSIS OF THE ICT THEMES EVIDENT IN THE RURAL CASE STUDY

6.1. Introduction

This chapter presents a summary of the findings related to all the stakeholders and discusses them in terms of concerns apparently underlying the informants' opinions expressed about ICTs in their local situations.

6.2. Summary of the four SWOT analyses

The rural stakeholders, each one providing and utilizing information and knowledge in the community, are the people who act as knowledge brokers, some for many years and thus those that I considered relevant for teaching ICT or with access to ICT at the time of the research or who fund ICT at the moment by community development fund raising programs. The rural stakeholders in this limited case study, therefore, include:

- officials from local government,
- village leaders and chief of sub-district,
- school teachers and principles and
- monks from the temple.

There are, of course, other local stakeholders that I did not interview who will play a role in the planned implementation of the project, ranging from the great majority of the local population, the local farming families, to local businesses of various sorts.

The following table displays the corresponding lists of results from the previous SWOT analyses of the informants' responses comparing potential policy issues related to each of the four local stakeholders; school, community, temple and local government. The table leads to axial themes a term from *grounded theory* pertaining to the four key concepts: 1) capacity development; 2) entrepreneurship; 3) knowledge management; and 4) sustainable development.

Table 6.1: Summary of SWOT analyses of policy issues related to all four stakeholders

	School	Community	Temple	Local government
Strengths	<p>(a) Awareness of potential of new technologies</p> <p>(b) Willingness to help and support</p> <p>(c) Basic computing equipment are available and affordable for only some people</p> <p>(d) Some new technologies are affordable and available for most people</p>	<p>(a) Awareness of interdependence of local institutions</p> <p>(b) Aware of potential of information and knowledge for better life and cooperation</p> <p>(c) Willingness to help and support</p> <p>(d) Willingness to share, learn and know more</p> <p>(e) Strong co-operation within a community</p> <p>(f) Awareness of community challenge for co-operation</p> <p>(g) Awareness of self-sufficiency approach</p> <p>(h) Some technologies are</p>	<p>(a) Awareness of potential of new technologies</p> <p>(b) A community centre for capacity building</p> <p>(c) A local centre of social and cultural development</p> <p>(d) Willingness to help and support</p>	<p>(a) Awareness of potential of new technologies</p> <p>(b) Awareness of the significance of building people's capacity</p> <p>(c) Tacit knowledge exists in local community</p> <p>(d) Willingness to share</p> <p>(e) Willingness to help and support</p> <p>(f) Willingness to co-operate</p> <p>(g) Basic computing equipment is available to some extent</p> <p>(h) Internet access is available for some local government offices</p>

		available for development		
Weaknesses	<ul style="list-style-type: none"> (a) Lack of access to data, information and voice (b) Lack of capacity to apply the technology (c) Insufficient intellectual capital (d) Misuse of technology resources 	<ul style="list-style-type: none"> (a) Insufficient social capital (b) Insufficient entrepreneurial capabilities and skills (c) Lack of technological skilled human resources (d) Educational and cultural barriers to access the new technologies 		<ul style="list-style-type: none"> (a) Lack of resources and facilities from government (b) Lack of technologically skilled human resources (c) Lack of entrepreneurial capabilities and skills (d) Insufficient intellectual capital (e) Insufficient social capital

<p style="text-align: center;">Opportunities</p>	<p>(a) New technologies in local institutions</p> <p>(b) Willingness to cooperate with among community members within/outside the region</p> <p>(c) A community centre for capacity building</p> <p>(d) Some initial public-private partnerships exist</p>	<p>(a) Willingness to share</p> <p>(b) Willingness to cooperate with/among community members within/outside the region</p> <p>(c) Some initial public-private partnerships exist</p> <p>(d) Some ICT initiative for development at provincial level exist</p> <p>(e) Some ICT initiative for development at community level exist</p> <p>(f) Self-sufficient community</p>	<p>(a) A community centre for multi-layered partnerships</p>	<p>(a) A community centre for multi-layered partnerships</p>
---	--	--	--	--

Threats	<ul style="list-style-type: none"> (a) Negative impacts of new technologies (b) Lack of trust from local people (c) Lack of resources and facilities from government (d) Lack of reliable and affordable telecommunication infrastructures (e) Lack of co-operation across community, public and private sectors (f) Lack of support of data and information (g) Lack of maintenance, service and support (h) Lack of training and practice (i) Socio-cultural/political barriers to access 	<ul style="list-style-type: none"> (a) Negative impacts of new technologies (b) Lack of resources and facilities from government (c) Lack of capacity support from government (d) Lack of reliable and affordable telecommunication infrastructure (e) Insufficient good opportunities and choices for growth (f) Insufficient supports of data and information (g) Some barriers to access to basic ICTs (h) Lack of coordination across community, public and private sectors 	<ul style="list-style-type: none"> (a) Insufficient co-operation across community, public and private sectors (b) Insufficient government supports and services 	<ul style="list-style-type: none"> (a) Negative impacts of new technologies (b) Lack of trust from local people (c) Lack of resources and facilities from government (d) Lack of reliable and affordable telecommunication infrastructures (e) Lack of co-operation across community, public and private sectors (f) Lack of support of data and information (g) Lack of maintenance, service and support (h) Lack of training and practice (i) Socio-cultural/political barriers to access
----------------	--	---	---	--

Grounded in the material summarized in this table, which combines the views of the informants about the four stakeholders (namely school, community, temple, and local government), two axial themes were identified. These can be taken as the axes of the informants' interpretations of what is generating, causing and maintaining social problems in rural areas: the inability to work together and the inability to access necessary resources. These two axial themes are interrelated with each other and to a variety of problematic development issues economically, culturally, technologically, politically and environmentally. These interrelationships are shown in the figure 6.1 below.

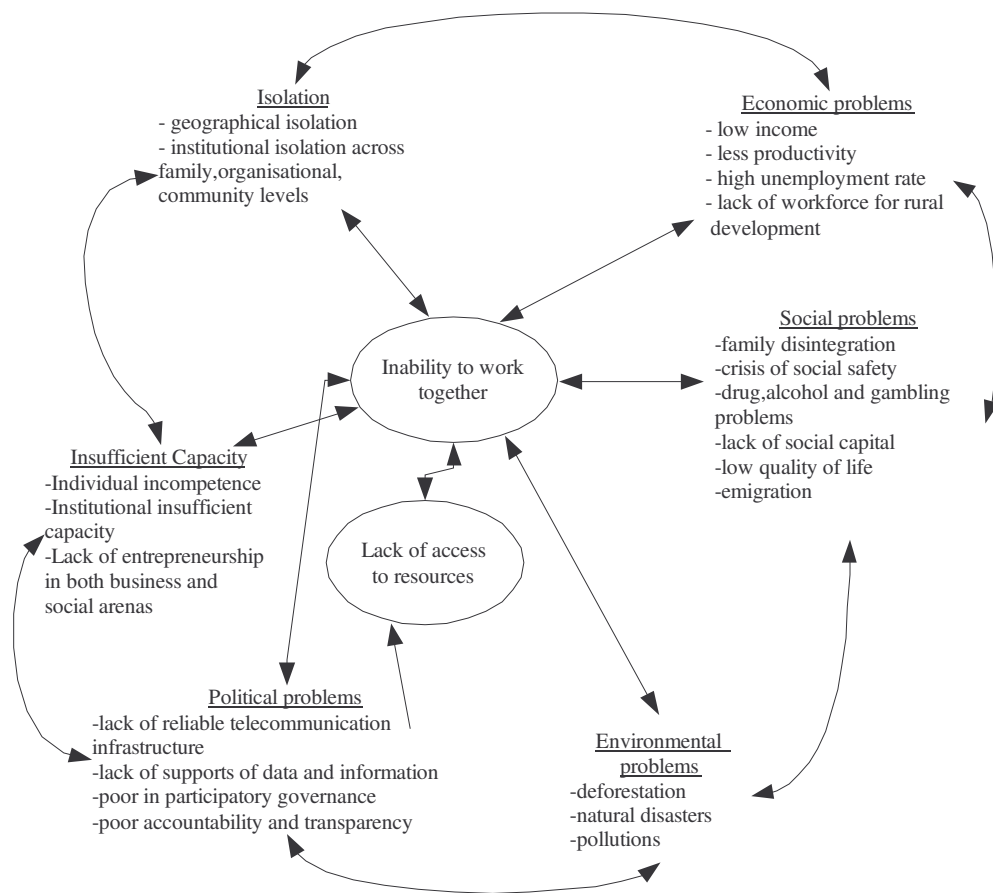


Figure 6.1: The axial themes and their relationships in rural areas of Thailand

Inability to work in partnership is both a cause and an outcome of a number of issues: insufficient capacity, isolation and the diverse problems in economic, social, environmental and political areas. Inaccessibility of necessary resources, whether intangible or tangible, private or public, is the other axial theme. Some

case studies show that even though they (the informants) understand and would be capable if they had access to the resources, without the accessibility to necessary and desired information and knowledge in order to share, learn and work together with other people or to the best practices or demonstration projects aimed at enhancing and promoting their competency and capacity at both individual and institutional levels, they cannot mobilize and utilize their own resources and effectively take advantages of potential benefits from other stakeholders outside their communities. The loss of this opportunity sometimes is much worse than our imagination can reach because the flow of information and knowledge is the essential source of power to deal effectively and efficiently with the complexity of problems and the diversity of a rapidly changing society. The next section will illustrate in more detail how the two axial themes are both a cause and an effect of the development in Thailand's rural areas.

6.2.1. The axial themes as the causes and effects of Thailand's rural development

This section describes the axial themes derived from chapter 4 and 5 as the results of data analysis. They include seven main themes: (1) political problem of not working together, (2) insufficient capacity and isolation, (3) inability to work together and economic problems, (4) inability to work together and social problems, (5) inability to work together and environmental problems, (6) inability to work together and political problems, and (7) inability to work together and inaccessibility of resources and their perpetual negative outcomes.

6.2.1.1. *Political problem of not working together*

Insufficient capacity here covers the lack of the organizational and technical abilities, relationships and values that enable and facilitate organizations, groups and individuals at any level of society to carry out functions and achieve their development objectives over time. The informants expressed their relationships and values such as willingness to share and help to work together with other people but lacking their own competence or a capability to externalize their tacit knowledge made them unable to help and succeed in their development goals. For instance, a lack of capacity in technological skills at an individual level made a teacher at a rural school

unable to help and support either students or local people to learn and use the new technologies for their own needs. I found that there are few teachers in local schools who can use computers well enough for their jobs. Furthermore, a lack of telecommunication infrastructure in school, such as telephone lines, would inhibit those teachers from promoting and broadening learning skills for their students by accessing remote information resources even if computing hardware were available for their use.

In addition, there was a poor scenario of working partnerships among local institutions – school, temple, community and TAO – with a deadlock of development occurring between those local stakeholders. For example, *AM*, a deputy director of TAO, cannot make a profit for a local community's products due to a lack of entrepreneurial skills to market them. She said that nowadays people are unable to think by themselves to solve their problems and need assistance from the local government department. At the same time, due to the new implementation of decentralization at the local government level, there is an unclear responsibility across school, community and TAO to look after the preschool students and village development projects such as a village or people's bank. According to *AM*, most people, including TAO members and staff, need strong supports from the central government in terms of available resources such as a budget and information (about laws, policy, services and so on) in managing many development projects. Apart from the coordination of relevant stakeholders across various sectors, providing access to resources including public services can be a useful form of assistance to enhance and promote capacity development at the individual and the institutional levels, in order to achieve better working together.

6.2.1.2. *Insufficient capacity and isolation*

Being geographically isolated in rural areas is a physical isolation by the nature of location, which nowadays can be theoretically bridged by investing in telecommunication infrastructure. Tackling the problem of this kind of isolation is possibly the sole responsibility of the state sector. On the other hand, some of the isolation of local institutions exists because, in terms of the perception of other local stakeholders including the local people in that area, they cannot serve, help and work in partnership with them to deal with the

complexity of problems. Some temples in my case study areas, for instance, lack capacity to apply tacit knowledge for balanced development in their local community and so will be gradually isolated from that community. A consequence of local institutions being isolated, as shown in this study, can lead to insufficient co-operation across the community, public and private sectors. Also, it can reduce and demote institutional and social capacities necessary for working together effectively.

6.2.1.3. *Inability to work together and economic problems*

Rural communities in developing countries have experienced a shortage of resources – money, workforce and technology - necessary for economic development.²²¹ For the case study areas in rural Thailand, lacking capacity and entrepreneurial skills at both individual and institutional levels, particularly at TAO level, makes it difficult for these local people, mostly farmers, to increase the profit from their potential productivity. For instance, *AM*, a deputy director of a TAO, said that “...the outcome is different from what the government thought. People can’t sell the product profitably. The more they produce or invest, the more they become poorer because they get into more debt.” She told me that this happens because local institutions such the TAOs and the state government lack entrepreneurial skills to help the local community, particularly its poor, to enhance and develop their economic performance. Informants in the case study areas suggested that this has driven most young people migrate to big cities such as Bangkok seeking for a better life because they could not find a job and create income in their own community or city. Informants suggested that the majority of the workforce in rural areas is unemployed and, moreover, most of the employed workforce is working at state institutions, for example, schools, TAOs and other government offices in the local areas, and this source of employment is limited. This limitation of the workforce and the lack of business and social entrepreneurship in working together are major causes of economic development failure in the rural case study areas. A consequence of the limitation also keeps the local people in a vicious circle of poverty that is a condition of a lack of physical necessities, assets and income causing an

²²¹ Sen, A. (1999). *Development As Freedom*. New York: Alfred A. Knopf.

inability to work together and an inaccessibility of necessary resources or basic services and then the latter effects create the former condition to occur again. These themes could have much wider relevance to other similar remote rural areas in Thailand.

6.2.1.4. *Inability to work together and social problems*

The vicious circle of economic poverty found in the rural areas of this limited study originating in part as a result of a combination of factors such as: i) being isolated, ii) lacking sufficient capacity, iii) socio-political connections and iv) lacking physical necessities, assets and income expands its effects to the social arena such as into family and social disintegration, crises of social safety and crime, drugs, alcohol and gambling problems, prostitution, low quality of life and emigration of young people and so on. Rural society nowadays is seen as a place for living by the elderly, young children and the unemployed including the low educated, while urban areas and big cities are places for studying by youth and working by adults. Rural communities lack fresh incentives economically and socially. Groups in partnerships working together are also weak and very limited. A clear picture for this scenario described by the old headman of a village is one of the best and truest contemporary evidence about this. He said regretfully that:

“For the development issue, I feel great regret that nobody in the family can help me with this. My own kids go to work in Bangkok. I stay here with my wife and grandchildren. Every day, I have to look after everything in the house including in the pigsty. I am so busy and confused. Therefore, I feel like I am not ready at 100 percent to contribute help in social development. You know, I am satisfied to work with the district. I am able to work together with them with all my guts. But I cannot work for my own community.”

People who still own their properties, such as lands for cultivation and husbandry, prefer to work and live there. But the people who lack that kind of property usually migrate to big cities and a head of family has to borrow some pocket money to go to work overseas, such as in the Middle East or other developed countries. Interestingly, most people in rural areas love to learn, share and work together with neighbourhoods inside their communities. It

means social capital still exists at some levels of partnership. It needs to be extended, expanded and strengthened with other stakeholders, experts, professionals and volunteers outside the communities aiming to establish a network of partnership to form an information and learning society with everyone seen as an active partner.

6.2.1.5. *Inability to work together and environmental problems*

At a community level in my case study, the vicious circle of economic and social difficulties is one of the major causes of deforestation in rural areas. There are strong voices from rich and wealthy people or countries blaming the poor for forest degradation. Meanwhile, the poor, especially those who live in remote areas, have no more choices for living but their governments want their citizens to be educated and smart in preserving and protecting a good environment for all. “But how to achieve the goal I don’t know as long as their stomachs are still hungry”, argued *AM*. It is a challenge for all stakeholders across different levels – the state, corporate, community, civil society and voluntary group - who will need to shift their position from being a development leader, as in the past, to become a pragmatic facilitator and go hand in hand with diverse people to serve the contemporary and next generations well.

To tackle the complexity of the problems effectively, it is essential to bring about the potential of new technologies, not just commercialize those hardware and software for earning profits and benefits from the poor and from poverty. This will require the integration of multidisciplinary knowledge and its key concepts to increase the social fabric of partners in society to work together to deal with the diverse problems and to achieve goals of sustainable development in relation to its triple, social, economic and environmental, bottom lines. Environmental concerns are not a sole responsibility of a single group of people or a single country, but a mutual task for a global society. Recently, the tsunami natural disaster occurred on the Asian continent and the loss of many hundreds of thousands of lives in many countries are evidence that the world environment is a global issue for everyone and every country, whether poor or rich, to work together to deal with the complexity and diversity of environmental conditions.

6.2.1.6. *Inability to work together and political problems*

A lack of political accountability and transparency combined with an inability to better govern by the state government is a mirror of the quality of the country populace in certain areas, such as in education, social structure and the economy. The circumstance of two sides, the political and the social sector, is reflected in both sides of the quality of practice and behaviour ranging from community to national levels. The inability of local stakeholders to work together at community level clearly reflects the real situation in which the perceptions of local people and local institutions pertaining to the concepts of rights and responsibilities, in other words accountability, are so dispersed or disconnected that it is quite difficult to synthesize enough social energy to handle and figure out the community difficulties in the social, economic and environmental arenas. For example, the intra-community village conflict seen in political conflict at community level among the villagers, school teachers and monks which became an unresolved problem as described by *PN*, a TAO council member:

“For the relationship between school and TAO, there are some disagreements between school and TAO. Some teachers, only some, not all, think that a TAO gets a higher salary than a teacher. Therefore, even if the TAO has the best project to do, the teacher always disagrees and interrupts its progress. Another example of monks, if they can work very well with people, there is a rumor that one of them is approaching a woman. Meanwhile, if they always stay in the temple and don't want to join in the village's activities, some people accuse them of being careless about people's lives and only getting food there (in the village). And then some people said that we wasted our food on the temple. In the school, if she or he is quite strict when working with people, that teacher would be blamed as not good enough to be a teacher, not as good as the other teachers in the school.”

This is an outcome or a picture amongst others showing that currently diverse people across various sectors cannot establish a network of partnership

to create an effectively dialogue to share and understand others' needs and problems. A bamboo boat needs the platforms of bamboos tied up together. It is a same analogy that a community or society needs the network of partnership of all stakeholders to tie up together and be flexible enough to deal with any complex and diverse problems or development goals of a rapidly changing society. Involving only the state sector cannot guarantee the bringing over of all development achievements to a national society, like only one piece of bamboo cannot build a bamboo boat to successfully carry a hut along a river.

This picture of political conflicts at community level is a community challenge for cooperation which should be taken into account by all social beneficiaries or stakeholders, to increase and enhance the capacity of local people and local institutions to work together in every step of making decision processes and agree that accountability and transparency are important issues which cannot be compromised.

6.2.1.7. *Inability to work together and inaccessibility of resources and their perpetual negative outcomes*

In the case study areas, the inability to work together at the individual level does not mean that the local people themselves lack their own knowledge to deal with a certain problem but refers to the fact that most of them have obtained insufficient capabilities and skills to work in partnership to solve a certain difficulty together. Alternatively they have no will to work together, because they do not understand why it is in their long term interests to do so. Some key themes, grounded in the field data, were: lack of coordination or co-operation across community, private and public sectors; insufficient support of accurate and relevant data and information, including insufficient government supports and services particularly in relation to enhancing people's entrepreneurship in both corporate and social aspects. These negative causes, in fact, are closely related to the inability to work together and the inaccessibility of resources, like the other side of the coin.

Everything is not perfect. Intervention can be right or wrong or be successful or unsuccessful, but how we can learn better from the past really does matter. A variety of people, poor and rich, men and women, smart and uneducated and so on, need to be promoted by any means to work better

together. Nobody, especially the powerless, should be left behind, because of, as Uma Kothari claims on the relationship between power and participation that ‘all individuals are vehicles of power’, where the powerful or rich people are ‘sites and holders of power’ and the powerless or poor are ‘the subjects of power’.²²² Even participatory development can ‘conceal inequalities (both economic and social) and in certain circumstances make matters much worse.’²²³ Participation can be used in cynical political ways and make little difference to the lives of ordinary people.

Public resources, whether in tangible and intangible forms, should be pooled together to serve people creatively and considerately with rights and responsibilities for everyone. The state should be an enabler or facilitator to steer and manage aiming to provide the best public services by working in partnership with others. The corporate or private sector has to commit to the principles of sustainability and diplomacy to ensure that their business activities today do not limit and hamper the opportunity and advancement in social, economic and environmental development of the next generation. Moreover, the community and civil society sectors should be supported to access necessary resources, in order to be autonomous but be connected to other stakeholders, aiming to be able to self-organize their own resources and stand well on their own feet. Let’s listen to a voice from the field, *UP*, a TAO council member, speaking about current development issues in terms of what kind of assistance is most needed:

“When you talk about a government policy or program, I don’t understand. When you ask this question, I see nothing. You push me into darkness. I don’t know for what purpose the government does invest in many projects. For example, when I use my mobile which has its infrastructure invested by the government, I am not quite sure if I do something that the government wants their people to do. Perhaps I am doing something different from the government’s aims. That is why I don’t understand and then cannot tell you what it is.” ... “... I know the capacity of our community

²²² Kothari, U. (2001). Power, Knowledge and Social Control in Participatory Development. In B. Cooke & U. Kothari (Eds.), *Participation: The New Tyranny?* (pp. 141, 152). London: Zed Books.

²²³ *Ibid.*

very well. I think we need someone, not only the technology itself, who is expert and has the vision to use something far better than those technologies. It may be a person who is expert in financial management or in other development areas from the city.”

This statement from a community leader shows that information and knowledge, not solely the new technologies themselves, including working skills in partnership with other stakeholders across different sectors could be a possible alternative to help his community and local people to increase their quality of living sustainably.

CHAPTER 7

POLICY RECOMMENDATION AND CONCLUSION

“The job of government is to provide the stitches that link the patchwork, not prescribe the colour, shape and texture of every separate piece of the quilt. The best of the new links will be created by people who rely on their own practical, tacit knowledge of what is needed and who harness their own anger and frustration into a new and positive energy. They may well be uncomfortable for politicians and bureaucrats alike, but that is what democracy is all about. People problems are not neat and tidy packages to be handled by experts at the center.”²²⁴

The thesis has argued that technology is a means to assist and support the creation of better links:

- across developed and less developed regions of Thailand
- across the different interest groups in the community through enhancing access to information that could lead to greater knowledge, mindfulness and understanding of one another .

It has not argued that technology in and of itself is either a) necessary or b) sufficient to bring about change and development in Thailand. Also I have not argued that decentralization is not without problems. Edgar (2001) and Harriss, et al (2004) have argued that there are positive and negative aspects associated with decentralization and empowerment of local institutions and people.²²⁵ The thesis has also not tried to make a case that by introducing technology all development problems and all governance problems will end. Rather it has shown that some local political factors and the willingness to co-operate are barriers as is the lack of technology. My data in chapters 4 and 5 have detailed and described instances where interest groups have served themselves and not other groups. Being prepared to work across interest groups and across institutions is very important.

It has however made the argument that greater participation in the process of governance through communication at the local level across the institutions of village,

²²⁴ Edgar, op cit, p. 193 cited in McIntyre System ic Design for the Future with the Community, local government and partner organizations ISSS conference 2005, Mexico.

²²⁵ Harriss, J., K. Stokke, et al., Eds. (2004), *Politicising Democracy: The New Local Politics of Democratisation*, Hampshire, Palgrave Macmillan.

temple, local government and school leads to more democratic policy making. Following Edgar's *The Patchwork Nation: rethinking government-rebuilding community*, the case was made that 'thick descriptions' and local knowledge must be drawn upon and shared across the different institutions at various scales – national, regional, community and individual - to make a difference to agricultural development, social development, small and medium enterprise development at local or community level and marketing opportunities and thus help to span the gaps in development between the developed metropolitan areas and the less developed more remote regions.

The study conclusion is based upon the field work. The key themes are drawn from and grounded in an analysis of the data. The objective of this conclusion is to make policy recommendation about who gets what, why, how and to what effect. The most important question is what difference the thesis will make in practical terms.

I have made the case that participatory processes are very important for development and for better and more democratic governance. The process of questioning ideally could involve the 'critical unfolding' of issues with those who are to be at the receiving end of the decisions – or at least properly represented.²²⁶ This is the principle of subsidiarity.²²⁷ This means that those who are at the receiving end of a decision need to be part of or represented in the process.²²⁸ Nevertheless on the basis of the research undertaken for the thesis some themes have emerged that could be explored with informants. The central policy themes that emerged are that currently:

- Disjointed decision making is the usual way of addressing challenges as a result of an inability to work together because of differences in political opinion or interests. Team dynamics and performance issues are serious problems among many which local institutions have faced when they have to work together (in order to participate in addressing common goals, roles, responsibilities, introductions, and stated agenda). They also lack skills of team-building and

²²⁶ See Ulrich's Critical Unfolding derived from Churchman cited in McIntyre-Mills, op. cit, p. 63

²²⁷ According to E.F. Schumacher, the principle of subsidiarity is 'an injustice and at the same time a grave evil and disturbance of right order to assign to a greater and higher association what lesser and subordinate organisations can do. For every social activity ought of its very nature to furnish help to the members of the body social and never destroy and absorb them.' And, 'these sentences were meant for society as a whole, but they apply equally to the different levels within a large organisation. The higher level must not absorb the functions of the lower one, on the assumption that, being higher, it will automatically be wiser and fulfil them more efficiently. Loyalty can grow only from the smaller units to the larger (and higher) ones, not the other way round and loyalty is an essential element in the health of any organisation.', see Schumacher, op. cit., p. 260

²²⁸ McIntyre-Mills, J. (Ed.). (2005). *Volume 1: Rescuing the Enlightenment from Itself: Critical and Systemic Implications for Democracy*. Boston: Springer (in press).

facilitation techniques to guide a team to overcome problems pertaining to working together effectively as a team such as overbearing, biased and reluctant participants and the unquestioned acceptance of opinions as facts, demanding, feuding, floundering and going off on tangents, also rushing to a project completion. For example the current situation in tambon Nong Hua Ku, some local people including local government officers reluctantly agree to work together in a community development project with other relevant participants such as local school teachers and monks by explaining that teachers are too demanding in terms of rule and responsibility in running the project and also blaming monks that they may have hidden agenda with their own interests if they are working closely in the partnership. Accountability and transparency are relevant across all local institutions. Knowledge management can help achieve this.

- Inaccessibility to resources clearly makes people and local institutions experience more difficulty to attain sufficient supports of accurate and relevant data and information (including funding and necessary assistance, such as healthcare, legal and business services, from external stakeholders, especially local government's inaccessible to government supports and services) in relation to enhancing people entrepreneurial skills of both corporate and social aspects.
- Time and money are wasted in trying to make administrative decisions across different sectors, in particular at the community sector. This partly results in lacking entrepreneurial capacities, skills and knowledge in which the latter is comprised of tacit and explicit knowledge and then the process of sharing the knowledge widely at the local level is quite difficult to be made available for benefit of all relevant stakeholders. The cycle of making, capturing, retaining, sharing and applying knowledge needs to be inclusive, in order to support the scaling up of participation.

Therefore based on the above important themes, I strongly argue that the significant consequence is that it will make local people more marginalized or isolated in terms of utilizing knowledge for gaining sustainable development achievement such as meeting the requirements of the Triple Bottom Line. As I mentioned earlier in chapter 1 that the national digital divide is wider amongst regions in particular between

urban and rural areas or the information ‘haves’ and ‘have-nots’. Meanwhile the information haves, mostly reside in public, corporate and community sectors in urban areas, take advantage from the new technologies to benefit and improve the quality of their lives especially in terms of knowledge enhancement. But local people who work in various sectors in rural areas are left behind because of lack of accessibility to resources, for example necessary information and knowledge including basic services from the state and corporate sectors. In some case studies, for example at Baan Thiam secondary school, at which the teachers there satisfyingly work with local temple as information and knowledge, not only internal, stakeholders by sharing, establishing and joining in a local training centre of information and knowledge sharing to improve and promote the capacity of their human resources including the school students. On the other hand, some case studies, such as *AM* and *UP* of a TAO, who have faced with the key axial problems show that they endeavor heavily by asking for help and assistances from both internal and external stakeholders to work together to improve the quality of life of the local people, because they themselves cannot work with other stakeholders and have no ability to access desired resources. This case demonstrates that lacking of technology and willingness to co-operate are important barriers among some to achieving sustainable development of rural areas in Thailand.

Therefore, I argue that if these problems cannot be solved by relevant stakeholders across different sectors, the consequence called ‘knowledge marginalization’ of local people and local institutions (such as schools, diverse religious institutions, villages and local government) will increase. This knowledge marginalization could become a root cause in impeding the progress of development. The current trepidation in the South of the nation is a good example of the development gaps between urban and rural areas in which institutions and diverse people across different sectors cannot work together effectively.

In order to make a policy recommendation to solve the above axial themes as the main problems emerging from this study, I have three recommendations: i) setting up networks of partnerships across the three sectors of governance namely; public, cooperate and civil society sectors with relevant stakeholders within and outside a community, ii) creating a community knowledge centre and iii) ICT legislation (plus revising its policy pertaining to the implications on a network of partnerships).

First, developing a network of partnerships based on joined-up government and governance of society which aims to enable external stakeholders such as from the state, public and corporate sectors as well as from voluntary sectors to provide (as I quoted Peter Wilkins' words in Chapter 1) 'as nearly as possible a complete service' to all member of internal stakeholder at community level. The service should include enough resources both tangible and intangible aspects necessarily to reduce the marginalization in rural areas.

One important objective of the network of partnership is to help local people be able to help themselves sufficiently and effectively in economic and social development or in other words is to meet the development goals of the Thai 'sufficiency economy'²²⁹ Secondly, the objective is to set up a community knowledge centre. The network could ensure that partnerships at the community level are developed in a practical way. The training needs to engage and embrace local people's commitment to increase their capacity by focus not only on the quality of life as the development goal achievement but also on the development of capacity itself as knowledge management.

A community knowledge centre aims to establish a space for local people and local institutions to play, interact, cultivate and manage the flow of resources, for example information and knowledge in case of intangible resources, provided and supported by both internal and external stakeholders. The knowledge spiral concept, knowledge conversion - socialization, externalization, combination, and internalization, is an important ingredient of the integrated development approach. It needs to be initiated and developed by the all members of the community knowledge centre. In reality, tacit knowledge is abundant in a local community but local people and local institution lack sufficient capacity (including confidence), such as access to needed resources, to effectively exploit it economically and sustainably. Moreover, a community knowledge centre must be supported by a community of practice (COP) to create networks of people who work together in school, temple, community and tambon administrative organization (TAO) and who are stakeholders across various

²²⁹ As emphasized in the literature review the sufficiency approach is the Thai version or adaptation of Triple Bottom Line and Third Way approach.

sectors. They need to meet regularly to share information and knowledge and to develop business and social entrepreneurial skills together.

In this sense, a community knowledge centre must be a knowledge generating centre with its basic functions comprising 1) collecting, 2) categorizing, 3) interweaving and 4) simplifying or making development issues, information and relevant knowledge clear and simple for utilizing and managing internal stakeholders at a community level. Therefore, fundamental services for building the capacity of internal stakeholders at community level, for instance training programme for entrepreneurship and ICT application usage, are essential. Other external stakeholders such as universities, corporations and government institutions have to contribute as Cross-Boundary Learning Systems coined by Morten Levin.²³⁰ Levin sees 'cross boundary learning systems' as the 'agora' or 'meeting place' which is 'the public space in which 'science meets the public'.²³¹ The collaboration among those parties - universities, corporations and government institutions – can support to build strong partners in sense of continuous improvement of the performance of the networks of partnership.

Finally, ICT legislation needs to be implemented nationally to facilitate better mutual understanding across interest groups. Thai government however has currently launched some ICT projects for development at national or policy level since 2000. Nevertheless, because of some important barriers or threats shown in this study, for example insufficient of resources and facilities from government, lack of reliable and affordable telecommunication infrastructure including lack of training and practicing lead to lacking of involvement of relevant participants across various sectors makes more difficulties to achieve the project goals. Rushing to the completion of the project without the awareness of the need for participation by all relevant stakeholders is problematic. This is where subsidiarity fits. The potential advantages of new technologies are not fully harvested or harnessed especially by the users at community or local level. Local people and local institutions such as schools or local government department in the rural case study areas are unable to act as a community knowledge

²³⁰ More details see Levin, M. 2004, 'Cross-Boundary Learning Systems—Integrating Universities, Corporations, and Governmental Institutions in Knowledge Generating Systems', *Systemic Practice and Action Research*, vol. 17, no. 3, pp. 151-159

²³¹ *ibid.*, p. 154

centre to be enabler or facilitator in promoting capacity building or unlock the talent of local people to participate effectively in development process.

Therefore, I argue that small pilot action research projects are needed so that we can learn by doing community development. I suggest that community knowledge centres could be launched. This would involve setting up centres with computing resources and training. They could be added to the schools and they could enable people of all generations to learn how to use ICTs learning. We need to make a learning community. In this sense I draw on Peter Senge's work²³².

Some issues, for example weaknesses and threats emerged in this study need to be addressed by, with and for the community in order to as try things out locally and then to establish the approach more widely across the nation. We need to learn by doing and to share it widely using communication to help one another. Perhaps ICTs can be of some use in this endeavour. We also need to shift from theory into practice. Knowing is one thing, practice at the local level to enhance participation is another.

²³² Senge, op. cit

References

- AAP. 2005. *Landslide win for Thai prime minister*. Retrieved March 07, 2005, from <http://news.ninemsn.com.au/article.aspx?id=37227>
- Accenture. 2001. *Creating a Development Dynamic: Final Report of the Digital Opportunity Initiative*. Retrieved Jan 04, 2002, from www.opt-init.org
- Amin, M.M. & Rodjanapiches, N. 2001, *Accelerating E-readiness in Thailand: A case study*, World Bank.
- Arunachalam, S. 2002. Reaching the unreached: how can we use information and communication technologies to empower the rural poor in the developing world through enhanced access to relevant information? *Journal of Information Science*, 28(6), 513-522.
- Balit, S. 1998. *Listening to farmers: Communication for participation and change in Latin America*. Retrieved August 07, 2002, from <http://www.fao.org/sd/Cddirect/Cdan0018.htm>
- Bassi, L. J. 1997. "Harnessing the power of Intellectual Capital", *Training & Development* 51(12): 25-30.
- Batchelor, S. 2002. *ICT capacity development issues*. Retrieved Jan 10, 2002, from <http://www.capacity.org/ict/editorial.html>
- Bilton, T., Bonnett, K., Jones, P., Skinner, D., Stanworth, M., & Webster, A. 1996. *Introductory Sociology* (3rd ed.). Hampshire: Macmillan.
- Bourdieu, P. 1997. *The Forms of Capital*, in Halsey, A.H., Lauder, H., Brown, P. & Wells, A. S. (eds.), *Education: Culture, Economy, and Society*, New York, Oxford University Press
- Compaine, B. M. 2001. *The Digital Divide: Facing a Crisis or Creating a Myth?* Cambridge: MIT Press.
- Caspary, G. 2002. *Information Technologies to Serve the Poor: How Rural Areas Can Benefit from the Communications Revolution*. Retrieved March 02, 2003, from <http://www.dse.de/zeitschr/de102-3.htm>
- Caspary, G., & O'Connor, D. 2003. *Providing low-cost information technology access to rural communities in developing countries: What works? What pays?* Retrieved Feb 20, 2004, from <http://www.oecd.org/dataoecd/13/52/7112502.pdf>
- Castells, M. 2000. *The Rise of the Network Society*. Oxford: Blackwell Publishers.
- CEMR. 1997. *Local Agenda 21 Basic guide*. Retrieved January 20, 2003, from www.agenda21.ee/Juhend/basicg.doc
- Chambers, R. 1997. *Whose reality counts? Putting the first last*. London: ITDG(Intermediate Technology Development Group).
- Charmaz, K. 2000. Grounded Theory: Objectivist and Constructivist Methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed., pp. 509-536). London: Sage.

- CIA. 2005. *The World Factbook*. Retrieved January 10, 2005, from <http://www.cia.gov/cia/publications/factbook/geos/th.html>
- Coghill, K. 2004. 'Federalism: Fuzzy Global Trends', *Australian Journal of Politics and History*, vol. 50, no. 4, p. 42
- Coyle, G. 2004. *Practical Strategy: Structured Tools and Techniques*. Harlow: Pearson Education.
- Dalal-Clayton, B., & Bass, S. 2000. *National Strategies for Sustainable Development: The Challenge Ahead*. Retrieved January 20, 2004, from <http://www.iied.org/docs/spa/epi25.pdf>
- Dhammananda, K. S. 1999. *Food for the thinking mind*, Buddhist Missionary Society Malaysia, Kuala Lumpur
- Dick, B. 2000. *Grounded theory: a thumbnail sketch*. Retrieved June 03, 2002, from http://www.uq.net.au/action_research/arp/grounde.html
- Eade, D 1997, *Capacity-Building: An Approach to People-Centred Development*, Oxford, Oxfam. P.28
- ECDPM. 2003. *Developing capacities for ICT enabled development*. Retrieved January 30, 2004, from <http://www.capacity.org>
- Edgar, D. 2001. *The Patchwork Nation: rethinking government-rebuilding community*. Sydney: HarperCollinsPublishers.
- Elkington, J. 1997. *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*, Capstone, Oxford
- Ellis, C., & Bochner, A. P. 2000. Autoethnography, Personal Narrative, Reflexivity: Researcher as Subject. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed., pp. 733-768). London: Sage.
- FAO. 2000. *The role of information and communication technologies in rural development and food security*. Retrieved July 16, 2002, from <http://www.fao.org/sd/CDdirect/CDre0055.htm>
- Gaventa, J. & Cornwall, A. 2001, "Power and Knowledge", in Reason, P. & Bradbury, H. (eds.), *Handbook of Action Research: Participative Inquiry and Practice*, SAGE Publications, London, pp. 70-80.
- Giddens, A. 1998. *The Third Way - The Renewal of Social Democracy*. Cambridge: Polity Press.
- Giddens, A. 2000. *The Third Way and its Critics*. Cambridge: Polity Press.
- Gordon, C. (Ed.). 1980. *Michel Foucault: Power-Knowledge*. Brighton: The Harvester Press.
- Gurstein, M. 2000. *The role of information and communication technologies in rural development and food security*. Retrieved September 11, 2002, from <http://www.fao.org/sd/CDdirect/CDre0055c.htm>
- Harriss, J., Stokke, K., & Tornquist, O. (Eds.). 2004. *Politicising Democracy: The New Local Politics of Democratization*. Hampshire: Palgrave Macmillan.
- Holloway, I. 1997, *Grounded Theory: Basic Concepts for Qualitative Research*, Oxford, Blackwell Science

- ICLEI. 2004. *What is Local Agenda 21?* Retrieved May 07, 2004, from <http://www.iclei.org>
- Information Technology Groups 2001. *Readiness for the networked world: A guide for developing countries*. Retrieved March 26, 2002, from www.readinessguide.org
- ITU. 2002a. *Bits and Bahts: Thailand Internet Case Study*. Retrieved Feb 25, 2004, from <http://www.itu.int/ITU-D/ict/cs>
- ITU. 2002b. *ITU World Telecommunication Development Report 2002: Reinventing Telecoms*: International Telecommunication Union (ITU).
- Kasemsuvan, S. 2004. *New Challenges for Building Up Institutional and Human Capacity for Economic Development and Cooperation*. Paper presented at the 12th OSCE Economic Forum, Prague.
- Kothari, U. 2001. Power, Knowledge and Social Control in Participatory Development. In B. Cooke & U. Kothari (Eds.), *Participation: The New Tyranny?*. London: Zed Books.
- Krongkaew, M. 2004. *The Philosophy of Sufficiency Economy*. Retrieved July 28, 2004, from http://kyotoreview.cseas.kyoto-u.ac.jp/issue/issue3/article_292.doc
- Lavergne, R. and J. Saxby 2001, *Capacity Development: Vision and Implications*, CIDA Policy Branch 3
- Levin, M. 2004. Cross-Boundary Learning Systems—Integrating Universities, Corporations, and Governmental Institutions in Knowledge Generating Systems. *Systemic Practice and Action Research*, 17(3), 151-159.
- Lieshout, M. v., Bijker, W. E., & Egyedi, T. 1998. *Social Learning*. Retrieved March 09, 2002, from <http://www.rcss.ed.au.uk/SLIM/private/I-studies/mvl/mvl.html>
- LGMB 2004. *Roundtable Guidance*. Retrieved March 09, 2004, from <http://www.lgmb.org.uk>
- Lucas, K., Ross, A., & Fuller, S. 2001. *Local Agenda 21: When is it a model for joined-up community based activity? Working Paper 1: Literature Review*. Retrieved December 30, 2003, from http://www.wmin.ac.uk/cfsd/reports/JRF_LA21_Literature_review.pdf
- M S Swaminathan Research Foundation. 2003. *Village Information Centres: Harnessing Local Knowledge Via Interactive Media*. Retrieved September 03, 2004, from <http://www.eldis.org/fulltext/policymakers.doc>
- Mansell, R., & Wehn, U. 1998. *Knowledge Societies: Information Technology for Sustainable Development*. New York: Oxford University Press.
- March, C., Smyth, I., & Mukhopadhyay, M. 1999. *A Guide to Gender-Analysis Frameworks*. Oxford: Oxfam.
- McIntyre, J. 2003. Participatory Democracy: Drawing on C. West Churchman's Thinking When Making Public Policy. *Systems Research and Behavioral Science*, 20, 489-498.
- McIntyre, J. 2004. Facilitating Critical Systemic Praxis (CSP) by Means of Experiential Learning and Conceptual Tools. *Systems Research and Behavioral Science*, 21, 37-61.

- McIntyre-Mills, J. J. 2000. *Global Citizenship and Social Movements - Creating Transcultural Webs of Meaning for the New Millennium*. Amsterdam: Harwood academic publishers
- McIntyre-Mills, J. 2003. *Critical Systemic Praxis for Social and Environmental Justice: Participatory Policy Design and Governance for a Global Age*. New York: Kluwer Academic/Plenum Publishers.
- McIntyre-Mills, J. (Ed.). 2005. *Volume 1: Rescuing the Enlightenment from Itself: Critical and Systemic Implications for Democracy*. Boston: Springer (in press).
- Morgan, P. 1998. Capacity and Capacity Development-Some Strategies. *CIDA Policy Branch, Note prepared for the Political and Social Policies Division, Policy Branch, CIDA*.
- Munyua, H. 2000. *Information and Communication Technologies for rural development and food security: Lessons from field experiences in developing countries*. Retrieved July 16, 2002, from <http://www.fao.org/sd/CDdirect/CDre0055b.htm>
- NESDB. 2001. *The Ninth National Economic and Social Development Plan B.E. 2544-2549 (A.D. 2002-2006)*. Retrieved October 06, 2004, from <http://www.nesdb.go.th/plan/data/SumPlan9Eng/menu.html>
- Niven, P. R. 2003. *Balanced scorecard step-by-step for government and not-for-profit agencies*. New Jersey: John Wiley & Sons.
- Nonaka, I., & Takeuchi, H. 1995. *The Knowledge-Creation Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford: Oxford University Press.
- OECD. 2001. *Information and Communication Technologies and rural development*. Retrieved Jan 07, 2002, from <http://www1.oecd.org/publications/e-book/0401081e.pdf>
- Pelto, P. J. 1970. *Anthropological Research: The Structure of Inquiry*. New York: Harper & Row.
- Pilat, D. 1998. The economic impact of technology. *The OECD Observer, Aug/Sep(213)*
- Punch, K. F. 2000. *Developing Effective Research Proposals*. London: Sage.
- Puntarigivat, T. 1998. *Toward a Buddhist Social Ethics: The case of Thailand*. Retrieved February 23, 2005, from www.crosscurrents.org/buddhistethics.htm
- Putnam, R. D. 1993. The Prosperous Community: Social Capital and Public Life. *The American Prospect, 13 (spring)*.
- Rae, D. & Carswell, M. 2000, "Using a life-long approach in researching entrepreneurial learning: the development of a conceptual model and its implications in the design of learning experiences", *Education & Training* 42(4/5): 220-227
- Ramirez, R. 2000. *Rural and remote communities harnessing information and communication technology for community development*. Unpublished Doctoral Thesis, The University of Guelph, Ontario.
- Reddel, T. 2002. Beyond Participation, Hierarchies, Management and Markets: 'New' Governance and Place Policies. *Australian Journal of Public Administration, 61(1)*, 50-63.

- Rhodes, R. A. W. 1997. *Understanding governance: policy networks, governance, reflexivity and accountability*. Maidenhead: Open University Press.
- Roche, A. M. 2001. What is this thing called workforce development? In A. M. Roche & J. McDonald (Eds.), *Systems, Settling, People: Workforce Development Challenges for the Alcohol and Other Drugs Field* (pp. 5-20). Adelaide: The National Centre for Education and Training on Addiction.
- Rydin, Y & Pennington, M. 2000, *Public Participation and Local Environmental Planning: the collective action problem and the potential of social capital*, *Local environment*, v.5, i.2, pp.153-169
- Samoff, J., & Stromquist, N. P. 2001. Managing Knowledge and Storing Wisdom? New Forms of Foreign Aid? *Development and Change*, 32, 631-656.
- Sarantakos, S. 1998. *Social research* (2nd ed.). Hampshire: Palgrave.
- Satha-anand, S. 2004. Buddhist Pluralism and Religious Tolerance in Democratizing Thailand. *APPEND*, 4(11), 193-231.
- Schumacher, E. F. 1973. *Small is beautiful: economics as if people mattered*. London: HarperPerennial
- Sen, A. 1999. *Development As Freedom*. New York: Alfred A. Knopf.
- Senge, P. M. 1990. *The Fifth Discipline-The Art and Practice of the Learning Organization*. New York: Currency and Doubleday.
- Strauss, A., & Corbin, J. 1998. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (2th ed.). Thousand Oaks: SAGE Publications.
- Suthasupa, P. 2000, *Rural community development in Thailand*, *Community Development Journal* 35(1): 75-83
- Thailand Development and Research Institute. 2000. *OECD/DAC Dialogue with Developing Countries on National Strategies for Sustainable Development*. Retrieved October 13, 2004, from <http://www.tdri.or.th>
- The Chaipattana Foundation. 2000. *Sufficiency Economy: Direction of the Ninth National Economic and Social Development Plan*. Retrieved July 28, 2004, from http://www.chaipat.or.th/journal/dec00/eng/e_economy.html
- UNDP. 2001a. *Human Development Report: Making new technologies work for human development*. New York: United Nation Development Programme.
- UNDP. 2001b. *ICT for development, UNDP Essential: Synthesis of Lessons Learned*. Retrieved June 30, 2004, from <http://www.apdip.net/documents/policy/actionplans/Essentials05092001.pdf>
- UNESCAP. 2004a. *Local Government in Asia and the Pacific: A Comparative Study, Country paper: Thailand*. Retrieved August 30, 2004, from <http://www.unescap.org/huset/lgstudy/country/thailand/thai.html>
- UNESCO. 1990. *World declaration on education for all and framework for action to meet basic learning needs*. Paper presented at the World Conference on Education for All - Meeting Basic Learning Needs, Jomtien, Thailand.
- UNDP. 2003. *Thailand Human Development Report 2003*. Bangkok: United Nation Development Programme.

- Visalo, P. P. 1999. *Buddhism for the Next Century: Toward Renewing a Moral Thai Society*. Retrieved February 23, 2005, from <http://www.saigon.com/~anson/ebud/ebdha289.htm>
- Waters, M. 2001. *Globalization* (2nd ed.). London: Routledge.
- Warren, L. 2004. A Systemic Approach to Entrepreneurial Learning: An Exploration Using Storytelling. *Systems Research and Behavioral Science*, 21, 3-16.
- Wenger, E. 1998. *Communities of Practice: learning, meaning and identity*. Cambridge: Cambridge University Press.
- Wilkins, P. 2002. Accountability and Joined-up Government. *Australian Journal of Public Administration*, 61(1), 114-119.
- World Bank. 2000. *Beyond the Crisis: A Strategy for Renewing Rural Development in Thailand*. Retrieved June 28, 2002, from <http://lnweb18.worldbank.org/EAP/eaprural.nsf/40ByDocName/StudiesByTypeofDocumentSectorReport>

Appendix 1
Ethics Form

Appendix 2
Basic Minimum Needs