

# **Assessment of Community Health Promotion Interventions Among Cross-border, Upland Communities in Kanchanaburi Province, Thailand**

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## **Background**

This study assesses how well health promotion interventions reach out to and impact upon cross-border, upland communities in Sangklaburi district, Kanchanaburi province, Thailand. Several ethnic groups live in this area, including the Karen, Mon and Burmese, the majority of which are socially and economically disadvantaged. They are also susceptible to several health threats, such as malaria, diarrhea, respiratory and HIV/AIDS infections due to behavioural, nutritional and environmental sanitation conditions. Their access to health and social services is also limited. In their study of health care service utilization among rural poor, Sermsri and others (2002) suggested that the local population's utilization is influenced by the image they hold of the hospital through their experiences regarding the quality of hospital services, social relationships between the community and local health care providers, community socio-economic conditions, occupational structure of the poor, and the severity of illness. Using data from the longitudinal Demographic Surveillance System in Kanchanaburi (KDSS), Rittirong (2009) adds living arrangement to the facets affecting the rate of physician visitation (among the elderly, in particular).

Although Thailand's Ministry of Public Health has attempted to deliver basic health care services to these people, many obstacles have stood in their way. Paramount among these are: too few or no community health stations and providers, inconvenient travel to the nearest provider due to the remoteness of villages, practitioners who do not speak the language or understand the culture of ethnic patients, the inadequate quality of

care providers, which is often below the national average, and some discriminatory practices (Aguettant, 1996; Asian Development Bank, 2001). In addition, some ethnic groups are still strongly tied to traditional health practices that affect disease management and health outcomes (Goldman, Pebley and Gragnolati, 2002). Their utilization of health care services is also affected by their inability to obtain health insurance cards (Sasiwongsaroj, 2008).

Similar to what Ransom, Joshi, and Nash (2008) found in their study of health care among the poor in India, these constraints can be divided into two major categories: the supply-side and the demand-side. The supply-side involves, for example, inaccessible locations, problems with service quality, and indirect costs. The demand-side entails time constraints, lack of transportation, perceived cost, and lack of trust. Lack of information or knowledge about existing services is also included in the demand-side (Ransom, Joshi, and Nash, 2008). In Indonesia, knowledge plays a vital role in that when people know specifically where health facilities are located, accessibility and utilization increases (Landiyanto, 2009).

In the upland study areas in Kanchanaburi province, however, very little is known about what conditions may hinder or promote access to and utilization of health and social services. Such information, however, is critical for designing strategies to effectively delivery health and social services to the local population groups.

### **Health and social services in study areas**

Since 2002, Thailand launched an insurance-based health care system, known widely as the “**30 baht card**” scheme. Using a universal coverage approach, this scheme aims for full coverage, except for about 3% of the population who are either non-Thai citizens or those whose residence information cannot be verified (Phoolcharoen, 2005). Uninsured ethnic groups are eligible for another type of insurance card known as a personal health insurance card for displaced persons. This card costs 1,000 baht and covers all members of a family for one year. However, in the upland communities that are a part of this study, persons living in two Karen and Mon villages cannot obtain this card because of poverty (Sasiwongsaroj, 2008).

In 2005, 60% of persons living in this study area were covered by a social insurance scheme, usually the 30 baht card scheme. Similar figures are observed in 2006 and 2007. However, 40% of the villagers aged 15-49 years were not covered by any health insurance scheme in 2005; a rate that gradually increased to almost 47% in 2007. This recent increase may be due to in-migration, as well as to a change in migration policy whereby migrants who hold specifically colored identification cards are no longer entitled to universal health care coverage. They have been advised to buy the personal health insurance card and pay the 1,000 baht fee. But according to villagers, this fee is too high, and thus many people cannot afford to pay for it.

Theoretically, the holder of a 30 baht card is supposed to pay a 30 baht fee for each visit he/she makes to nearby public health facilities. But in practice, and according to local health personnel, clients often claim that they do not have money and decline to pay for services. As a result, the cost of services and treatment is almost always waived. Although a few villagers are willing to donate money to the health centre instead of paying the fee, the provision of virtually all health services is free of charge.

In addition, other private and non-governmental organizations are operating hand-in-hand with public organizations in rendering health services to the poor. Central to this paper's concern is the services provided to the people in the study communities by local Thai NGO. Most of its staff are locally recruited from the communities in which they are working, so that they understand the local language, culture, and problems in the communities.

Using a community development approach, the local NGO began implementing health and social activities in the study areas in 2000. This approach views health in the holistic and broader context of social and economic improvement and views individual and community empowerment as vital to improving health status. This approach emphasizes people's participation in identifying problems, their needs, and ways to improve the overall situation, while the change agent (in this case, the local NGO) is the enabler or facilitator of change (Bracht, 1999).

The local NGO activities implemented in the study communities since 2000 can be grouped into four major areas as following:

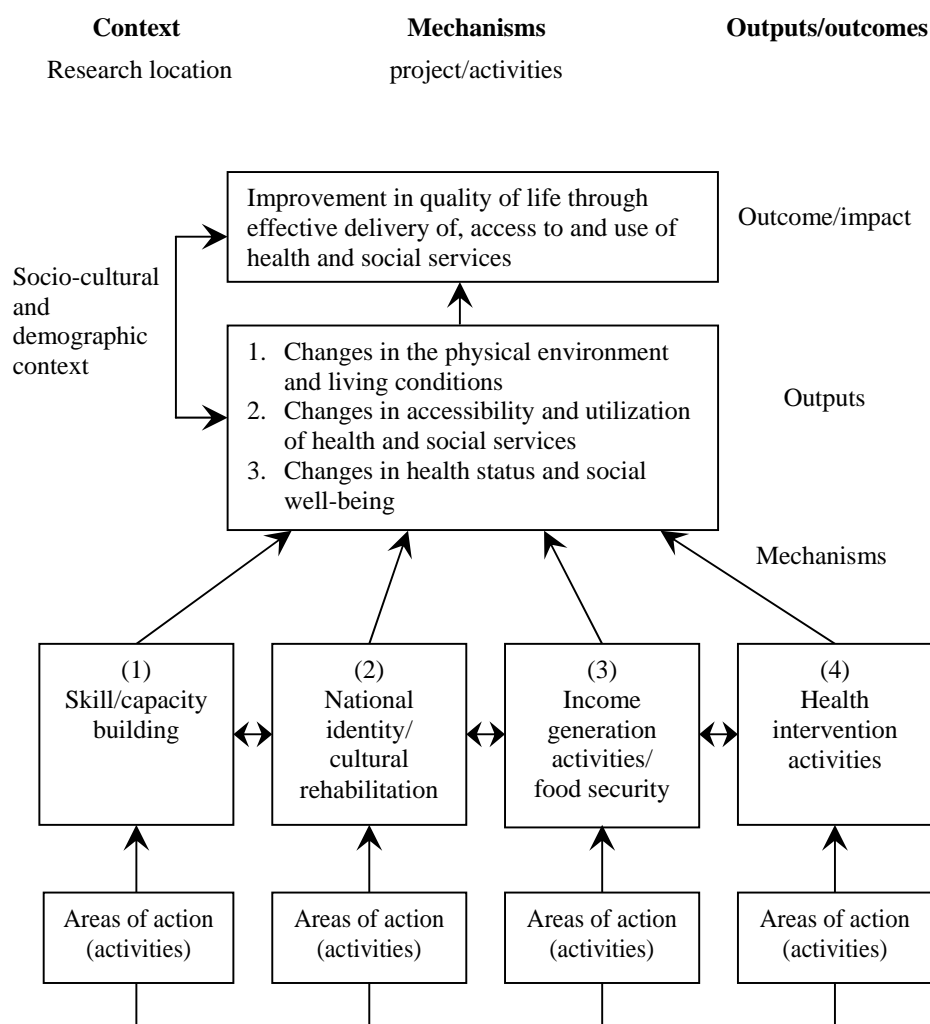
**Figure 1.1: Areas of intervention and their objectives**

<b>Areas of intervention</b>	<b>Objectives</b>
1. Skills/capacity building.	To provide information and knowledge related to health and other issues so as to improve the standard of living of people in the communities.
2. National identity and cultural rehabilitation.	To provide partial support for the processing fee in obtaining Thai citizenship as requested by a village committee, which, in turn, contributes to greater participation in community work.
3. Income generation and food security.	To improve food security and nutrition and to reduce poverty among ethnic groups under the project.
4. Health intervention activities.	To improve housing conditions, sanitation and the living environment of the ethnic groups under the project.

**Research Purposes**

This study specifically aims to identify local NGO's role and its contributions to the health and well-being of the people in the study communities. Linkages between context, mechanisms, and outputs/outcomes, as specified by Gomm and Davies (2000), are utilized as a tool to understand local NGO's role and contributions as shown in the Figure 1.2

**Figure 1.2: Linkages between context (research location), mechanisms (project/activities) and outputs/outcomes**



**Note:** Adapted from Gomm and Davies, 2000.

For broader purposes, this research study also seeks to contribute to improving the quality of life of ethnic groups living in four cross-border, upland communities in Sangklaburi District in terms of their access to and utilization of health and social services. Using longitudinal data from three survey rounds (2005-2007) as the basis for

analysis, this study identifies facilitating and limiting factors to access and utilization, while simultaneously addressing the general principles of effective activities/services provision. Strategies for the effective delivery of health and social services will then be recommended.

### **Research Questions**

1. Has the usage rate of existing, accessible health and social services increased or decreased over time among the ethnic groups under study?
2. What facilitating and limiting factors affect access to and utilization of existing health and social services, and have these factors changed over time?
3. What types of potential strategies should be implemented to improve access to and utilization of health and social services and thus contribute to an improvement in quality of life?

### **Research Objectives**

1. To identify changes in health status and social well-being and their determinants among the ethnic people living in the four study communities.
2. To systematically describe existing health and social services, with special attention being given to changes in accessibility and utilization and their causes.
3. To determine the extent to which living conditions, socio-cultural and demographic status, and the physical environment affect changing patterns in health and social well-being as well as access to and utilization of health and social services.
4. To recommend potential strategies to improve the delivery and use of health and social services, thus contributing to the improvement in quality of life.

## Methods

This study is a knowledge-generating evaluation. It aims at discovering the general principles the local NGO has used in providing health and social service interventions in order to determine the effect they are having on the health and social well-being of the population under study. Four cross-border, upland communities in Sangklaburi District, Kanchanaburi Province, that have received health and social service interventions from the local NGO, were selected for study.

This study employed quantitative and qualitative approaches to data collection and analysis. Data from three consecutive years (2005-2007) were analyzed jointly to identify major determinants of changes in health and social well-being, as well as access to and use of health and social services. Changes were measured in two major areas: (i) local NGO project/activities performance, and (ii) health behavior. Changes in the projects/activities performance cover awareness of the projects/activities, as well as participation in them. Changes in health behavior include accessibility and utilization of health and social services, as well as health outcomes.

### Quantitative method

Three annual censuses during 2005-2007 were undertaken at individual, household and community levels in the study villages by trained local interviewers.

*Individual data* were collected from three groups, each of which had different purposes and questions. Among individuals age 15-49, data on demographic, socio-economic, health-related behaviour, utilization of health facilities, and participation in social and health services interventions were collected to describe important phenomena as well as to assess changes. An assessment of health-related quality of life, however, was conducted among respondents age 15-29 years old using the SF-36 survey.<sup>1</sup>

In households containing under-five children, their mothers or guardians were interviewed to collect data on each child in terms of immunization, sickness and health service usage histories.

*At household level*, for each household member, data were collected in terms of age, sex, ethnicity, nationality, type of card held, birth place, marital status, education, occupation and health information (including measurement of weight and height). Other data that were collected included household debt, land use patterns, and household characteristics, as well as sources of drinking water, household water use, latrine ownership, electricity and household assets.

*At community level*, the local NGO activities and other government-sponsored intervention programs conducted in the areas were recorded in order to obtain a fuller picture of existing services, as well as for comparison. General information on such areas as population and health, public facilities, and patterns of land used were also collected to gain insight into the context of each community.

**Table 2.1: Unit of analysis by types and year**

Unit of Census	2005	2006	2007
No. of Communities	4	4	4
No. of Households	411	413	438
No. of Population (all ages)	1,594	1,972	2,204
No. of Interviewed Persons aged 15-49	656	664	733
No. of Interviewed Persons aged 15-29	260	242	340
No. of Children under 5 Years	251	226	258

### Qualitative method

Qualitative data were collected by project investigators through in-depth interviews, informal group discussions and observations. Data analysis centered on understanding: (1) living conditions, lifestyles and their changes over time; and (2) how and why living conditions, lifestyles, social-cultural and demographic conditions facilitate or hinder access to and utilization of existing health and social services.

Researchers conducted four informal group discussions in order to gain information for designing questionnaires. Participants to these discussions were village



informants, village leaders, health volunteers, and children. Twenty in-depth interviews also were conducted with key informants, such as local NGO staff, health personnel, school teachers, district officials, village leaders, villagers, and malaria clinic staff. Additional in-depth information was also obtained from consultative meetings. At these meetings, researchers – working with local interviewers and local NGO staff – discussed detailed findings from each census round with district health officers as well as villagers in each community.

### **Protecting privacy and maintaining confidentiality**

During the supervisor and interviewer training sessions, respect for human subjects was discussed thoroughly and intensively. During the fieldwork, all respondents were asked for their initial permission to interview, and then the respondents read, or in many cases the interviewers read to them, the project's consent form. In the consent form, it clearly stated that the information collected at individual, household or village levels will be presented in an aggregate manner and cannot be traced back to any sources of data. The respondents are free to refuse the interview, stop the interview at any time, or refuse to answer any question. If agreed, the respondents signed the consent form. In cases where the respondents could not write their names but agreed to be interviewed, interviewers asked their permission to sign the interviewers' name on the consent form. During the interview, the interviewers tried their best to interview the respondent privately. The consent form was used at all interview levels, namely: 1) respondent for the individual information 2) household head for the household information, and 3) village's key informants for the community data.

In the project office, the questionnaire's cover page, which contained the respondent's name, place and time of the interview, was kept separately from another part that contained all information. Running numbers to both parts were assigned in order to cross-check in case of coding or typing errors. The questionnaire's cover pages were locked in a secure location, and only the project director and data manager could access this information. This same process was used for scanned questionnaires, which separated each questionnaire into two files – cover page and information files. Access was restricted for the cover page file. The printed questionnaires were destroyed after the scanning.

For the public use of data, the data set will not consist of any identification number that can be linked to the village, household or individual respondent.

### Context

The study areas are four communities in Sangklaburi district, Kanchanaburi province. Sangklaburi is one of thirteen districts in the province, and it is located along the Thai-Myanmar border, 350 kilometers west of Bangkok. Sangklaburi area is about 3,500 square kilometers; 515 square kilometers are dwellings and agricultural areas, while the rest is reserved forest and reservoir area. The district is mountainous with sloping land and poor soil quality. Most residential areas are located in the forest reserved area. The district town and several communities are relatively new, being settled by people who were relocated after the Kao Ieam Dam was built in 1984.

Sangklaburi district is divided administratively into three sub-districts and 20 villages. The district is home to 42,320 people. There is great ethnic diversity, though 68% of the total population is ethnic Karen. Many residents, particularly those living in villages close to the Thai-Myanmar border, live on both sides of the border due to geographic and ethnic similarities.

The four study communities are characterized by high population mobility (both in and out migration), and high dependency ratio.

In the study areas, ethnicity varied among the respondents. The Karen was the largest ethnic group (about 68%). The second largest ethnic group was Mon (around 18%), while those who reported themselves as being Thai accounted for 8%. The ethnic composition of the villagers remained the same over the three survey rounds. About two-third of the respondents could speak the Thai language, while at least 30% were illiterate in Thai. These persons were either elderly or recent cross-border migrants.

In terms of place of birth, in general 60% of the people were born in Thailand. The proportion of people born in Myanmar gradually increased from about 36% in 2005 to 39% in 2007. This trend reveals an increase in cross-border migration from Myanmar to Thailand.

Among persons aged 15-49 years in this study, only a small fraction held Thai national identification cards, whereas the majority held colored cards.<sup>2</sup> Across the three survey rounds, the proportion of persons without identification cards increased from 5.9% in 2005 to 12.6% in 2007. This may indicate an increase in cross-border migration during the study period, especially by Myanmar residents who entered into Thailand with some settling in the study villages.

The vast majority of the villagers worked as wage laborers who earned about 90-100 baht per day working in the district town or 120 baht per day elsewhere. These rates are much lower than the official minimum wage. For household food consumption, they often relied on subsistence agricultural as well as gathering wild foods, such as bamboo shoots and leafy vegetables.

Among respondents aged 7 years and older, although the proportion of persons having no education declined gradually over the three years period, well over one-third had never been to school, about half had a primary education, and one in ten received secondary education; tertiary education was negligible.

Poverty and lack of legal status are highly important factors that discourage children in the villages to continue their education. Most secondary schools are located in the district town or in the provincial town which requires travel to and from the villages. The cost of daily transportation is expensive. More importantly, persons without Thai nationality and especially those holding colored cards must get official approval to travel outside of the district boundary.

On the other hand, however, the lives of household members can be enhanced through cohesive networks which form the basic part of their social capital. People in the study areas live in simple lives and in harmony with the environment. They utilize all resources including physical resources (forest, mountain and streams). Human resources which composed of family, relatives, friends and ethnic is formed, maintained and extended. These social network, social support and assistance serves as important sources of social capital and social security within and outside of the community, especially in times of need.

## **Intervention Performance**

Several governmental and non-governmental organizations provide health and social service interventions in the study communities. This paper focuses on those undertaken by the local NGO in order to explore how their interventions reach out to and impact upon the people in study communities. Intervention performance is measured through a comparison of the performance between interventions implemented by government organizations and by the local NGO. The areas of analysis are: (a) awareness of the interventions, (b) participation in them, and (c) benefits received from participation. The analysis of these areas as provided by the local NGO or government organizations is based on the report of participation of households in any local NGO or government interventions during 2005 to 2007.

For this paper's purpose, participation was used as a proxy for awareness. As indicated by high participation, the data clearly show that the people in the study areas are fully aware of the activities/programs rendered by the local NGO and government organizations.

The interventions encompass four major areas, namely, skills and capacity building, national identity and cultural rehabilitation, income-generation and food security, and health intervention activities. Analysis of the data revealed that household participation is the highest for health intervention activities, followed by the areas of skills / capacity building, health information providing, income-generation and food security, national identity and cultural rehabilitation. Overall, almost all households reported that they benefited from participating in activities/programs provided by the local NGO and the GOs.

### **Benefits received from participation**

It is obvious that those who participated in the activities or services provided by both the local NGO and the GOs received benefits one way or another. However, the benefits from participation vary, which may be due to the variety of activities or programs, themselves. Significant proportions of respondents noted that they gained increased knowledge on different aspects, particularly on health, nutrition, occupation

and sanitation. Regarding knowledge on sanitation, community residents emphasized that the knowledge they gained led to improvements in household and community sanitation. The most obvious improvements were in garbage disposal, household cleanliness, and latrine use. Some respondents also noted that participating in activities/programs allowed them to expand their social networks, ones that they could use in times of need.

### **Who benefits most from the activities/services?**

The data analysis reveals that all participants, regardless of age or sex, equally benefited from participation in the local NGO and the GO activities. The data also show that about twice as many non-Thai, who currently have no Thai identification card, reported that they benefited from participating in income generation or food security activities/programs compared to those who are Thai or non-Thai but hold Thai identification cards.

Consequently, this study clearly indicates that interventions provided by the local NGO and the GOs benefit the least opportunity group and the poorest households in these study villages. *The local NGO has achieved its mission to work for and facilitate activities/programs that benefit the most disadvantaged group.*

In comparing activities or programs delivered by the local NGO and the GOs, though results were achieved by both parties, the local NGO activities/programs had a higher beneficiary participation level than those undertaken by the GO. The local NGO has fulfilled its mission to assist the needy or the least advantaged group who are not able to receive services provided by the GOs and/or other organizations. The local NGO's major task has been to bridge the service gap, reaching out to people that the GOs cannot reach, either due to government policy or their heavy workload. This mission makes the local NGO's interventions valuable for the local GOs, as well as for study communities.

Moreover, the local NGO and local GOs work together in a partnership. They share and exchange information, and sometimes the GOs provide valuable support to the local NGO activities/programs, such as technical assistance as well as equipment.

Therefore, both the local NGO and the local GOs share in the accomplishment of their missions. Their existence, operation and collaboration reinforce each other and promote successful achievements.

What they have achieved at this stage is an improvement in the “lived experiences” of beneficiaries and in their ability to use knowledge to carry out recommended actions (Lucas and Lloyd, 2005). According to Nutbeam and Harris (2004), changes in knowledge and self-efficacy are two critical health promotion outcomes.

### **Child Health and Use of Health Services**

#### **Background characteristics of the preschoolers**

In terms of sex, a higher proportion of boys than girls existed in the study villages, with the exception of 2005 when girls slightly outnumbered boys. Almost all children were born in Thailand with percentages ranging from 97.6% and 95.7% in 2005 and 2007 respectively. Although the number is relatively small, the data shows that there has been a gradual increase in the proportion of young children who were born outside of Thailand. This finding suggests that cross-border migration is an on-going phenomenon, especially of families from Myanmar to the study villages.

Regarding child ethnicity, the Karen was the first largest group (ranging from 72.6% in 2005 to 71.5% in 2007), while Mon was the second largest group (ranging from 16.7% in 2005 to 12.9% in 2007).

#### **Accessibility to health care services among under-five children**

Accessibility to health care services among children under five years of age is confined to immunization status, nutritional status, and use of health services among those who were ill in the month before the survey took place. The data reveal that young children’s access to basic health care, as measured by the immunization status, was relatively good, particularly for one-time BCG vaccinations. However, incomplete vaccination exists for DPT and Polio immunizations.

The relationship between malnutrition and illness is widely recognized. In the study communities, the prevalence of underweight among pre-school children improved from 2005-2007, though the prevalence of overweight children is rising. Chronic malnutrition as measured by height-for-age is common among children, corresponding to the poor environment and social circumstances in which they live.

Childhood illness was relatively common in the study villages, though signs of improvement can be seen over the study period. The most common illnesses were respiratory illnesses and diarrhea. The prevalence of childhood respiratory diseases may be associated with the prevalence of smoking by household members, and it may also be affecting child nutritional status, though more work in this area is needed.

When children become ill, the main source of treatment is the community health center, and especially those centers that have a close social relationship with the communities they serve. A decline in hospital visits is also noted, possibly due to the overall decline in child illnesses as well as the higher cost of hospital treatment compared to treatment at health centers.

## **Access to and Utilization of Health Services Among Adults**

### **Access to health information**

In this study, access to health information among respondents aged 15-49 years was assessed regarding sources of information on malaria and HIV/AIDS, which can also reflect sources of information on other health-related areas.

Interpersonal communication, either with health personnel and NGO staff, is the most popular source of health information among the villagers, whereas printed media was the least popular.

### **Disease/Symptoms experienced**

The percentages of disease or symptoms experienced were calculated from the number of people who reported that they had a specific disease or symptom during the

previous year and previous month of the interview divided by the population for each year. Malaria, respiratory infection and diarrhea are among the common illnesses among the villagers. The data indicate that the health status of persons aged 15 to 49 years in these four villages improved over time, particularly in terms of a decline in malaria incidence. Interestingly, the incidence rates for all diseases or symptoms – both during the previous year or previous month – decreased, except for diabetes, which is also increasing globally. Self-reported illness in the last 12 months among those aged 15-49 has also declined over time.

### **Use of health care services**

Since a wide range of public and private health services are available in the district, further questions were asked whether those who were sick sought any treatment. Almost one in ten said that they did not seek any treatment at all. Among those who sought treatment, the local health centre is a popular source for health care among the villagers. Self-medication also appears to be a very common practice, which rose by 10% over the three-year study period. The recent change in the government's health insurance scheme for non-documented migrants may, to some extent, have led to a reduction in public health care utilization, while at the same time encouraging the practice self-medication.

### **Health Status and Its Impacts on Quality of Life**

The study presented here measured changes in adult health over time, which is often referred to as endpoint outcomes of health promotion (Nutbeam and Harris, 2004). This assessment was done through measuring the respondents' perceptions of their health in determining health status.

Health-related quality of life was assessed among respondents aged 15-29 using the SF-36 which contains 36 items that measure eight dimensions of physical and health status. These dimensions reflect whether or not a person can function in a particular role or activity given their current physical or health status (Ziebland, 1994), such as physical functioning, cognitive functioning, self-efficacy and well-being



(Albrecht, 1994). The major thrust of the SF-36 survey is to measure what aspects of their lives have been affected and to what extent.

The number of young adults (age 15-29 years old) included in this health-related quality of life assessment were 260, 242 and 340 in 2005, 2006 and 2007 respectively. Generally, the results indicate that the majority of young adults in study communities feel that their current health is either “very good” or “excellent” and that it has improved over time. Similar trends are also observed in the assessments of functional and well-being statuses, as justified by minimal impacts of health on their various role functions and well-being. These study results imply, therefore, that respondents are satisfied with their quality of life, despite their poor living conditions and socio-economic status.

### **Effect on Health and Social Well-being**

#### **The local NGO's role, contributions, and its effect on health and social well-being**

The local NGO utilized a social approach, to provide social and health service interventions for ethnic groups living in Sangklaburi district, Kanchanaburi province, Thailand. The overall aim of the local NGO's interventions was to enhance the quality of life of the people through community development using socio-economic activities as an entry point, as well as to emphasize people's participation in identifying problems, their needs and ways to improve the overall situation.

In order to determine the local NGO's role and its contributions to the health and well-being of the people in the study communities, three points of health promotion assessment were employed (Nutbeam and Harris, 2004).

*The first point of measurement* (or health promotion outcomes) assesses whether knowledge and self-efficacy among community residents have changed over time. The data from this study show clearly that community residents are aware of and participate in interventions provided both by the local NGO and local GOs. Their knowledge has increased along with their ability to carry out recommended actions that improve their health and quality of life, despite their current living conditions and socio-

economic situation. The local NGO has thus contributed to an improvement of their lived experiences, especially among the most disadvantaged group, which is the aim and the outcome measure of health promotion interventions (Lucas and Lyoyd, 2005).

*The second point of measurement* (or intermediate health outcomes) determines whether there are changes in health behavior (i.e., access to and utilization of services) as well as an improvement in the health status of community residents. Regarding accessibility to and utilization of services by preschool children, the data reveal that young children's access to basic health services is relatively good and has improved over time. However, a high prevalence of chronic malnutrition as well as incomplete immunization persist. Geographic barriers in remote areas and the high mobility of the population may contribute to these problems. More intensive efforts should be made to improve immunization coverage as well as chronic malnutrition in the villages.

Among adults aged 15-49 years old, their health status has improved as is evidenced by declines in the incidences of all diseases. Self-reported illness has also dropped.

However, in 2007 the use of public hospitals and community centers appeared to drop from the previous year, especially for visits to public hospitals. Among those who sought treatment from these health services, the largest proportion visited community health centers. This trend may be due to: (1) the change in the government's health insurance policy, and/or (2) a decline in the incidences of severe diseases. Both of these reasons have apparently led to an increase in self-medication.

Overall, existing services contribute considerably to improving accessibility to and utilization of services, as well as an improvement in the health status of adults in the study communities.

*The third point of measurement* (health outcomes or end point outcomes) examines changes in quality of life or "health" as defined in terms of function and well-being in everyday life and within the social context (Tarlov, 1996). Focusing on young adults aged 15-29 years, results from subjective health measurements indicate that they perceive themselves to be in a good state of health, as justified by minimal impacts of

health on their various role functions and well-being. In other words, they are in good health and function well in daily life and in their social context.

The above three health promotion measurements provide a fuller picture of the health status of community residents. The local NGO's positive role and contributions can be clearly seen in the health promotion outcomes (the first point), and especially among those persons who are the least advantaged group.

The second and third point of outcomes, on the other hand, can be used to evaluate the overall ongoing health practices among individual residents or communities. Though the local NGO's role and contributions cannot be directly pinpointed, these outcomes can be used to provide an indication of ill health or specific needs and can be used to recommend additional interventions to improve the situation accordingly. The most disadvantaged group, in particular, falls into the local NGO's mission and specialties.

Overall, the local NGO's role and contributions have contributed to improving the lived experiences and the capacity to perform/function among communities residents so they can lead their lives fully in their social environment. In this context, health takes on another meaning. As Tarlov (1996) has noted, health may thus be seen as the capacity for individual fulfillment within a social context. This then is added on as another facet of the people's social capital.

### **The local NGO's guiding principles in providing health and social service interventions**

The local NGO used a community development approach as the theoretical foundation for formulating and implementing their health and social service interventions. On a practical level, moreover, they added several additional elements that would make their ideas "work". These elements are listed below, and they should be treated as core elements of a social approach to implementing health interventions and applicable for other organizations.

- The local NGO's mission is *to assist the needy or the least advantaged group* who do not have access to services provided by GOs or other organizations.
- The local NGO's major task is *to bridge the services gap* by reaching out to those persons that GO services cannot reach, either due to government policy or their heavy workload.
- The local NGO maximized their impact by working as *partners* with local GOs, rather than competitors. Their existence, operation and collaboration reinforce each other and promote successful achievement. Local NGO also *did not upset local sources and networks of assistance*, choosing instead to strengthen them.
- The local NGO emphasized *people's participation* in identifying problems, needs, and ways to improve overall situation.
- The community residents, therefore, feel that they are the "*owners*" of the activities, while the local NGO is the "*facilitator*".
- Most local NGO *staff are locally recruited* from the communities in which they are working, so that they understand the local language, culture, and problems in the communities.
- Using *socio-economic activities as an entry point* instead of public health, but keeping health as an end point.
- Being aware of *not to upset local sources and networks of assistance*, but rather strengthening them.

### Programmatic Implications

Based on the study key findings, following implications are laid out as reference for future program formulation and implementation.

- *Increase provision of knowledge* on different aspects, particularly on health, nutrition, occupation and sanitation. In addition, emphasis should be on strengthening their ability to carry out recommended actions.
- Increase provision of programs/activities that *expand and strengthen local networks*, especially among various GOs. Since networks with various GOs will help increase access to and utilization of services.

- Provision of programs/activities to *improve immunization coverage and chronic malnutrition* among pre-school children.
- Increase provision of health information through interpersonal communication, either with health personnel and/or NGO staff, since written health education materials are not practical due to language limitations.
- Publicize knowledge learned from this approach and its interventions so they can be expanded to other cross-border areas.

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### Notes

- 1 The SF-36 survey comprised validated and standardized psychometric scales that measure eight dimensions of physical and mental health status (Ware and Sherbourne, 1992). The main advantages of the SF-36 are: (i) it was designed to detect variations in health status among generally healthy populations; (ii) it provides a multi-dimensional assessment of health, including both mental and physical aspects; and (iii) it is short and easy to administer.
- 2 Non-Thai residents are assigned cards of different colors that identify what rights and responsibilities the cardholders are entitled. For instance, colored cardholders must stay within the district boundary where they are registered and are only allowed to travel out of the district if official permission is granted and social resources.

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