Mae Hong Son

Provincial Millennium Development Goals Report 2005











Mae Hong Son Provincial Millennium Development Goals Report 2005

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Foreword

In September 2000, 189 nations came together at the United Nations Millennium Summit in New York and endorsed the Millennium Declaration, setting out a global agenda for the start of the 21st Century to promote human development and reduce global inequalities.

The Millennium Development Goals (MDGs) – eight ambitious goals to be achieved by 2015 – are drawn directly from the Millennium Declaration. The eight goals contain 18 targets that are monitored through 48 indicators.

Goal 1: Eradicate extreme poverty and hunger

Goal 2: Achieve universal primary education

Goal 3: Promote gender equality and empower women

Goal 4: Reduce child mortality

Goal 5: Improve maternal health

Goal 6: Combat HIV/AIDS, malaria and other diseases

Goal 7: Ensure environmental sustainability

Goal 8: Develop a global partnership for development

Thailand's first *Millennium Development Goals Report 2004* is a story of success, ambition, and tough challenges. Thailand has made remarkable progress in meeting most if not all MDGs. The internationally set targets for poverty, hunger, gender, HIV/AIDS and malaria have been achieved more than 15 years ahead of schedule. The education goal is likely to be achieved soon, and progress is being made in reaching the targets of child and maternal health, as well as environmental sustainability.

Not satisfied with these achievements, Thailand commits itself to a set of more ambitious targets – called MDG Plus – that go well beyond the internationally agreed MDGs. For example, having already reached the international MDG poverty target of halving the proportion of people living in poverty between 1990 and 2015, Thailand has set an MDG Plus target of reducing the proportion of poor people to below 4 percent by 2009. If successful, this will represent a stunning four-fifths reduction in the proportion of people living in poverty since 1990, six years ahead of 2015. Thailand has also set ambitious MDG Plus targets for education, health, gender equality, and environment. This bold agenda is a tribute to Thailand's can-do and results-based approach to human development and poverty reduction.

In spite of these impressive achievements, major challenges remain. Persistent disparities among regions and groups within the country, including marginalized and vulnerable groups, need to be addressed. Policies and resources are needed to tackle poverty and below-average health conditions in the Northeast, the remote highland areas of the North, and the three predominantly Muslim southernmost provinces, areas that are lagging behind the rest of the country.

During the past decade, Thailand has been successful in extending the coverage of social services. Now the challenge is to upgrade quality. The education system needs further reform, health services need improvement, especially in the areas of preventive care and health promotion, and the capacity of local government to do their job needs strengthening in the context of Thailand's decentralization efforts.

Finally, the Report is about Thailand reaching out to other countries and contributing to the global partnership for human development called for in MDG 8. As a successful medium human development country, Thailand is becoming an important development partner engaging in technical cooperation and sharing its experience with neighbours and beyond, as well as opening up its expanding markets for other developing countries.

Thailand is firmly committed to meeting its obligations to the international community (MDG 8) as well as to its own citizens (MDGs 1 to 7 "Plus").

Acknowledgements

Provincial Working Group

In an effort to begin the localization process for the Millennium Development Goals (MDG) in Thailand, key actors within Mae Hong Son province came together through a series of intensive and productive workshops to jointly formulate Thailand's first provincial level MDG report. The activity took place over an 8-month period from October 2004 to May 2005. Under this initiative, the province set up a formal working group to implement this task that was chaired by the Governor and consisted of key stakeholders including representatives from provincial government offices, private sector, civil societies and NGOs in the province. It was rewarding to see how all members came together and contributed greatly to the success of this endeavour. (The list of Working Group members is contained in Annex I).

The work of this group was greatly assisted by the special efforts of the Provincial Statistics Office. We also recognize all the staff at the provincial and district level that not only provided valuable input, but are working to integrate the strategies within the formulation of the provincial development plan for implementation.

Supporting Contributors

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Executive Summary

First Provincial MDG Report

As a next step in operationalizing the Millennium Development Goals, it is necessary to try and find a way to begin to localize them below the national level. A focus on the local level is considered important because keeping only a national focus on achieving the aggregate MDG targets and the framework of monitoring and implementation, in general, does not take the local dimension and conditions into consideration. There is an inherent danger that even if the targets are achieved at the national level, the inequalities within a nation, across groups and places, would still persist.

In an effort to begin this localization process for the MDGs in Thailand, key actors within Mae Hong Son province came together through a series of intensive and productive workshops to jointly formulate Thailand's first sub-national level MDG report. The activity took place over an 8-month period from October 2004 to May 2005. Under this initiative, the province set up a formal working group to implement this task that was chaired by the Governor and consisted of key stakeholders including representatives from various provincial government offices, private sector, civil societies and NGOs in the province

Challenges and successes in Mae Hong Son

Mae Hong Son is one of the poorest provinces in Thailand. Part of this status is attributable to its difficult terrain that has limited agricultural expansion and has kept the province an enclosed region accessible only with some effort. There is a diverse mix of cultures and ethnic groups within the province creating a mosaic of traditions and lifestyles. It borders the Union of Myanmar, which has led to a significant influx of refugees and other immigrants since 1995. The province has managed to retain an abundant forest cover and rich bio-diversity, beautiful scenery and various local cultures and traditions that are offering potential for development of eco-tourism. However, this growing tourism industry is beginning to impact local people's way of life and natural conditions. Economic growth has remained a priority for provincial development that has typically taken a sectoral rather than integrated view to development issues. The education and health sectors also represent significant challenges with standards lagging behind national averages and targets.

The Mae Hong Son key decision-makers became increasingly aware that stressing only economic growth was not enough, and that it could eventually threaten the long-term social, cultural and environmental sustainability of the province. Under this growing awareness, it became clear that a means for highlighting the non-economic aspects of development was necessary as well as a process for integrating those aspects within the overall provincial development framework in a realistic and strategic manner. Under these conditions, the province agreed to take ownership of the process to formulate a Provincial Millennium Development Goal Report (PMDGR) and to attempt to integrate the output within their provincial development plan for implementation.

From their work, Mae Hong Son has identified their potential to achieve several of the global MDGs, as well as some of the more ambitious national MDG Plus goals and targets, but significant challenges still remain in overall poverty reduction, specific health issues and achieving universal education. In spite of these challenges, several important achievements were made that should provide encouragement for not only Mae Hong Son, but also for the overall effort to localize the MDGs.

Most important of these achievements is the awareness of the need to take a more integrated and balanced approach to development issues. Such an approach is being supported by the formulation of key strategies to set a clear direction for resolving many of these issues on a priority basis and linked to the efficient budgeting process. Therefore, the challenges before us are how Mae Hong Son can attain the Global MDG Benchmarks, national MDG Plus, and MDG Stars of Mae Hong Son, and at the same time sustain the local identities of Mae Hong Son, namely, the richness of nature and the diversity of cultures and how can we integrate the MDGs into local agendas that balance between achieving realistic local targets and still maintain the global objectives?

Taking a participatory process-oriented approach to formulation

In elaborating the PMDGR, a dual approach was adopted that saw a close and intensive working arrangement with key local actors in the consideration and formulation of the actual PMDGR as well as an associated capacity building program that sought to strengthen the capacity and capability of provincial officials and other key stakeholders on formulation and implementation of an integrated and strategic planning and management process. Core stakeholders, comprised of civil society as well as government and private sectors, were identified who subsequently participated in selecting and prioritizing the key issues related to setting their provincial MDGs and associated Report formulation. The participation focused on both the process and also a set of guiding principles in order to build joint ownership of the provincial MDGs and commitment to achieving them.

Elaborating and integrating a set of strategies within the development objectives of the province was at the core of the process. By adopting a 'strategy management' approach, the provincial working group was able to clearly understand who their 'clients' were and more effectively analyse the situation within the local development context and national/global frameworks. Tools such as a 'Strategy Map' were also used to help illustrate whether the various perspectives were coherent and supportive of the organization's existing strategies. The Balanced Scorecard (BSC) was applied to help participants view strategies from four perspectives of financial and non-financial measures. Through this process, the group was able to quickly move from the planning stage into the more critical strategy formulation and are expected to begin implementation of those strategies within the forthcoming budget year.

There are further actions that the provincial level must also undertake to make not only the MDGs a part of their future development, but also to pursue overall sustainable development on a balanced an integrated basis that addresses all development concerns. Two key components are to continue the localization process at both the integrated provincial administration (cluster of provinces) as well as to more closely involve the municipal and Tambon authorities (local government at the sub-provincial level). While the integration at the provincial cluster level will increase efficient use of resources, the local government levels are seen as being important to achieving effectiveness by helping build increased partnerships and ownership not only at government levels, but increasingly by civil society who have the biggest stake in achieving success.

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Acronyms

BNS Minimum Basic Needs Survey
BOD Biochemical Oxygen Demand

BSC Balanced Scorecard

DCID Department of Curriculum and Instruction Development

DO Dissolved Oxygen

DOLA Department of Local Administration
DOPA Department of Provincial Administration

EMISC Education Management Information System and Communication

EPPO Energy Policy and Planning Office

GDP Gross Domestic Product
GMS Greater Maekong Subregion
GPP Gross Provincial Product

HIV/AIDS Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome

IPA The Integration Provincial Administration

IPAC The Integration Provincial Administration Committee

IT Information Technology

MDGR Millenium Development Goal Report MDGs Millennium Development Goals

MHS Mae Hong Son
MOE Ministry of Education
MOI Ministry of Interior

NESDB The National Economic and Social Development Board

NGOs Non-Governmental Organizations NRD 2 C Nation Rural Development 2 C NSO National Statistical Office

OBEC Office of the Basic Education Commission

OEPP Office of Natural Resources and Environment Policy and Plan

ONEC Office of the National Education Commission

ONPEC Office of the National Primary Education Commission
OPDC Office of the Public Sector Development Commission

OTOP One Tambon, One Product

PAO Provincial Administrative Organization

PSO Provincial Statistical Office RTG The Royal Thai Government SAR The Self-Assessment Report SMEs Small-Medium Enterprises

TAO Tambon Administrative Organization

TB Tuberculosis

TCB Total Coliforms Bacteria
TEI Thailand Environment Institute

UNDP United Nations Development Programme
UNHCR United Nations High Commissioner for Refugees

WG Working Group

Location Map



Introduction

Background to this initiative

In September 2000, Thailand joined other members of the international community in pledging their support for the Millennium Declaration that set out a global agenda for human development from which the MDGs emerged. As Thailand is expected to achieve most, if not all, of the MDGs well in advance of 2015, the Kingdom formulated a set of targets and indicators that went well beyond those agreed at the international level under the concept of Millennium Development Goals Plus (MDGs +).

In spite of the achievements gained by the Kingdom, some major challenges remain where there are persistent disparities among regions and groups within the country including marginalized and vulnerable groups. Policies and resources are needed to tackle poverty and below-average health conditions in the Northeast, the remote highland areas of the North, and the three predominantly Muslim southernmost provinces, areas that are lagging behind the rest of the country.

As a next step in operationalizing the MDGs, it is necessary to try to find a way to begin to localize them below the national level. A focus on the local level is considered important because keeping only a national focus on achieving the aggregate MDG targets and the framework of monitoring and implementation, in general, does not take account of the local dimension. There is an inherent danger that even if the targets are achieved nationally, the inequalities within a nation, across people and places, would still persist. The aim, therefore, is to use a participative process as a key approach to having the local authorities and stakeholders take ownership of the MDG process.

In an effort to begin this localization process for the MDGs in Thailand, key actors within Mae Hong Son Province came together through a series of intensive and productive workshops to jointly formulate Thailand's first sub-national level MDG report. The activity took place over an eight-month period from October 2004 to May 2005.

Preparing MDGs at the provincial level

Mae Hong Son Province was selected as the pilot area for implementing the MDG process at the sub-national level for several reasons. This province was identified in Thailand's Millennium Development Goal Report (MDGR) as one of the country's poorest provinces, lagging behind the rest of the country in many developmental areas, especially in the hilltribe population. The province is also experiencing a large influx of refugees and migrants from Myanmar and other areas, putting further stress on its social development capacity. Many of the previous development initiatives focused on economic development and gave very little consideration to a more balanced approach to addressing other issues. In response, a joint meeting with executives and senior government officials of Mae Hong Son considered the possibility for setting/localizing indicators, collecting corresponding data, setting goals and assessing development in the province towards more sustainable and balanced goals, according to the MDG framework. The province subsequently agreed to ownership, and worked with the NESDB under UNDP support to prepare the first pilot Provincial MDG Report (PMDGR) in the country.

While there are a number of other jurisdictional levels and functional areas that could have been targeted for the first sub-national MDGR undertaking, the MDG report at the provincial level was considered very strategic. Under the ongoing decentralization process, local authorities are receiving increased responsibility

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for managing the local development process as well as being required to be more responsive to local needs through a more open and participative decision-making process. Within this framework, in theory, the provincial level is well placed to not only have development impact on a wide range and number of people throughout their jurisdiction, but are also able to support the spreading and replication process to lower levels of government in the municipalities and sub-districts. In addition to this, 'clusters' of provinces are formed at a functional level that share many similar development issues and opportunities that are to be undertaken on a coordinated and complementary basis. Such an arrangement permits upward communication of the MDG process and objectives to a wider regional scale, thus protentially supporting even greater impact.

Under this initiative, Mae Hong Son Province set up a formal working group to implement this task. The working group was chaired by the Governor and consisted of key stakeholders including representatives from various provincial government offices, the private sector, civil society and NGOs in the province.

To support the provincial activities in preparing the PMDGR in Mae Hong Son, the Thailand Environment Institute (TEI) was engaged to provide key inputs to the process, as well as to strengthen the capacity of the province in development planning and strategy formulation that is consistent with the MDGs.

Methodology applied in formulating the Mae Hong Son PMDGR

In spite of the lack of direct participation by the elected level, the methodology applied was still highly participative as it worked to involve a range of stakeholders from civil society as well as from the provincial administration and the private sector. A public participation process, emphasizing bottom-up elaboration of goals within the context of Mae Hong Son was at the heart of this component. To this end, facilitation of inputs from stakeholders was emphasized and supported by technical resource persons. Achieving and sustaining active participation of representatives from the stakeholder groups was a very challenging aspect of the work as public awareness on the MDGs is still relatively low in Thailand, thus requiring significant awareness raising and motivational inputs at the early stages.

Integrated within the formulation process was a strong capacity-building component that cut across all activities and targeted both the staff and elected levels of the province as well as other local government authorities in the province. In addition to strengthening the overall planning approach, specific training inputs also targeted building capacity at the provincial level to more effectively undertake a range of planning activities from data collection to strategy formulation and subsequent implementation and monitoring. Strategic planning/management approaches and tools were applied for strengthening the overall development process regarding the MDGs. The intent was to put the MDGR into a context that could be integrated within the existing provincial development planning and budgeting processes, leading to a more balanced and sustainable approach that would see the timely implementation of MDG-related activities as part of day-to-day operations and not as 'special' one-time events.

The resulting lessons learned, along with the full documentation of the MDGR process and associated capacity building are expected to form the basis for further dissemination and replication to other provinces in the Kingdom. Therefore, while the main users of the report will be the planners and decision-makers in Mae Hong Son, a wider set of users is also anticipated. As noted, the lessons learned, methodology and process will have further applications; however, the actual content of the report is foreseen to have important consequences for local authorities in Mae Hong Son at the municipal and sub-district levels. The output from the report highlights a number of specific issues that can have local impact and require local actions. The report offers a means for bringing about both cooperation between these local authorities and the province, as well as providing guidance on the issues and potential strategies that these local governments could pursue further.

The process-oriented approach using strategy management

In elaborating the PMDGR, a dual approach was adopted that saw a close and intensive working arrangement with key local actors in the consideration and formulation of the actual PMDGR as well as an associated capacity-building programme that sought to strengthen the capacity and capability of provincial officials and other key stakeholders formulation and implementation of integrated and strategic planning and management process. Core stakeholders, comprised of civil society as well as government and private sectors, were identified who subsequently participated in selecting and prioritizing the key issues related to setting their provincial MDGs and associated Report formulation. The participation focused on both the process and a set of guiding principles in order to build joint ownership of the Provincial MDGs and commitment to achieving them. Elaborating and integrating a set of strategies within the development objectives of the province were at the core of the process which was guided by five principles for strategy management:

- Executive leadership is the key to mobilizing change within an organization. The efforts have been put into gaining the commitment at the executive level to take the lead in advocating change.
- Strategy management is iterative and must be integrated within the overall development planning and implementation as an ongoing process.
- Translating the strategies that have been formulated into operational terms, typically through an agreed action plan.
- Strategic planning approaches and effective management of the strategies are focused in order to introduce the needed changes in the organization to align the organization with the strategy that has been agreed upon.
- Making the strategy an integral part of the organization and giving personnel and stakeholders the opportunity to demonstrate how their day-to-day activities contribute to the strategy.

The 'execution' of a strategy becomes more important and more valuable than the actual 'formulation' of a strategy; as a result, the output (a set of strategic themes and approaches) of the report will be translated into detailed strategies and subsequent action through integration within the Provincial Development Plan and corresponding budget allocation. A Strategy Map was also used to illustrate whether the various perspectives were coherent and supportive of the organization's existing strategies. The Balanced Scorecard (BSC) was applied to help participants view strategies from four perspectives of financial and non-financial measures.

One of the keys to successful implementation and monitoring of such a locally-based MDG Report was to integrate the goals and targets into the existing planning framework. Under the ongoing decentralization process, Thai local authorities have made advances in the

areas of development planning by recently moving away from a one-time planning activity every five years to now preparing an overarching strategic plan and implementing it through a three-year annually rolling plan of operation. Through this mechanism, the outputs of the MDGR can more easily be integrated within the overall development framework of the province in an integrated manner that more effectively balances all aspects of economic, social, environmental, and organizational development.

The development context of Mae Hong Son

Mae Hong Son, situated in northern Thailand, is 924 km from Bangkok by main road and covers an area of 12,672 sq km. The Union of Myanmar borders the province to the northwest along the Daen Lao and Thanon Thongchai mountain ranges as well as the Salawin and Meoi rivers. Topographically, the province is a high plateau region with a varied terrain ranging from 100-2,000 metres above mean sea level. This difficult terrain has kept this province an enclosed region accessible only with some effort. Human settlements and agricultural activities can be found only in the confined plains located in valleys, resulting in agricultural constraints and thus semi-dependency on Chiang Mai for supplying needed goods and services.



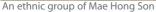
Wat Chong Klang

Apart from inhabitants of Thai nationality, there is a large portion of the population that has no nationality. This is due to the geographical fact that Mae Hong Son borders the Union of Myanmar. Since the insurgency of 1995, the influx of refugees has been a normal phenomenon. There are also groups of Chinese who left China and entered Thailand after World War II during the period 1954 up to 1989.

According to December 2004 statistics of the Department of Provincial Administration (DOPA), Mae Hong Son's registered population was 243,735 persons, which has been declining, possibly reflective of the search for economic opportunities outside the province. For the total provincial population, those with Thai nationality and with local home records accounted for 88.21 percent of the total population, while those without Thai nationality, but with local home records, accounted for 10.34 percent, and those who were registered in the central record office represented 1.45 percent. Those without Thai nationality living in Mae Hong Son and considered 'aliens' are further subdivided into ten groups with a differentiated set of identity cards:

- 1) Former Komintang soldiers
- 2) Haw Chinese
- Free Chinese
- Displaced Burmese arriving before March 9, 1976
- Displaced Burmese with permanent residence – arriving after March 9, 1976
- Burmese immigrants (workers) residing at place of employment – arriving after March 9, 1976
- Highland groups (comprised of nine Thai tribes and alien tribes)
- Highland established communities
- Illegal alien workers
- 10) Refugees living in border camps







Bua Tong flower fields -One of Mae Hong Son's tourist attractions

In Mae Hong Son there are several ethnic groups. Tai Yai or Khon Tai, the largest group, live in the main agricultural plains. The others are mountain tribes that live in high plains. The Karens are the biggest group, followed by Lahu, Lisu, Lau, Hmong and Haw, respectively in number. Besides these, there are some other smaller groups that have yet to be identified. The ethnic diversity has brought in a range of traditions and beliefs that are all still well observed and practiced. As Mae Hong Son has been kept relatively isolated for some time, these minority groups still sustain

their culture and diversity today. The sustainability of these ethnic groups is viewed as significant and has an important impact on Mae Hong Son's development initiatives.

The forest is seen as the most important natural resource for Mae Hong Son. Forestland accounts for 90 percent of the total area of the province and is mixed deciduous, mountain pine, hill evergreen and forest plantations. Several rivers, such as the Pai and Yuam, have their origin in Mae Hong Son. Moreover, Mae Hong Son is still the main source for fluoride and barites. The local population has used these and other natural resources for their livelihood through forest product collection as well as food and medicinal plant sources. These natural resources also play an important part of Thailand's main ecotourism and biodiversity conservation resource base.

The economic structure of the province is relatively simple. In 2002, Gross Provincial Production (GPP) of Mae Hong Son was 5,358 million baht. The main economic activities can be divided into two general sectors agricultural and non-agricultural. Average agricultural productivity of the province (1996-2002) accounted for approximately 19.45 percent of GPP. Key crops were paddy field, garlic, soya bean and cabbage (Mae Hong Son Provincial Office, 2002). Non-agricultural productivity for the same period accounted for 77.90 percent, of which the main productivity was from wholesale, retail and other trading (26.82 percent).

Mae Hong Son has many tourist attractions. These include natural sites such as national parks, the Bua Tong flower fields, hot springs, caves, waterfalls and rapids; historical sites such as the Japanese Soldiers Museum, the Phi Man Cave, the Ruam Thai Village and the Rak Thai Village; and cultural sites such as Wat Prathat Doi Kong Mu, Wat Chong Kham, Wat Chong Klang, the Karen villages, highlander villages, handicrafts centres and OTOP shops. In spite of difficult access, the number of tourists visiting Mae Hong Son increases each year. The number might still be regarded as small compared to that of Chiang Mai; however, the seasonal tourist activities, especially those linked with the cool climate of December to February every year, can make a good earning for the province.

Unfortunately, with the increasing number of tourists visiting, impacts are beginning to be seen on local people's ways of life and on the natural conditions. It is creating more garbage and wastewater, and the local cost of living keeps increasing.

Overall development strategies for Mae Hong Son

Extracted from its previously formulated Provincial Development Plan, previous indicators and targets of Mae Hong Son development strategies for the year 2004 had primarily stressed economic growth (e.g. increasing GPP, and the value of investment, tourism income, OTOP, and agricultural product sales). To a lesser extent, some strategies also covered environment and security issues, but there were no integrated strategies and indicators for the social, education, and public health sectors. The Self-Assessment Report indicated that, in 2004, Mae Hong Son Province had efficiently accomplished the majority of its indicators and targets regarding both provincial development strategies and that of the Royal Thai Government (RTG) policies. Only the GPP and the rate of unemployment did not hit the declared targets.

However, it became increasingly clear that stressing only economic growth is not enough. This could eventually threaten the long-term social, cultural and environmental sustainability of the province. With this growing awareness, it was apparent that both a means for highlighting the non-economic aspects of development, as well as a process for integrating those aspects into the overall provincial development framework in a realistic and strategic manner were necessary.

Therefore, strategies were needed that could build upon Mae Hong Son's comparative advantages and overcome identified weaknesses and challenges vis-à-vis their emerging MDGs:

Strengths/opportunities:

- · High potential for expanding eco-tourism
- Healthy and clean environment
- Distinctive and diverse cultural composition of population
- · Abundant forest cover and bio-diversity
- Mountainous landscapes with beautiful natural settings
- Life and property security

Weaknesses/challenges:

- Communication/linkage network constrained by the mountainous terrain that causes settlements to be far apart and difficult to access and communicate with
- Air quality deterioration from forest fires and use of wood products in household cooking and heating
- Limited agricultural area that accounts for only 3.4 percent of the total area
- Low per capita income and uneven income distribution

- Lower completion rates of secondary and high school
- Limited access to safe drinking water and sanitation
- Many highland areas lack access to basic services and income generation opportunities
- Political instability in Myanmar and fighting along the Thai-Myanmar border cause refugees seeking safety in Thailand
- Limited participation of key sectors such as women in representative positions and highland groups in development planning

In Mae Hong Son, the principle of 'Sufficiency Economy' was to be followed in formulating the MDG Report. This principle reinforces the strong long-term sustainability linkages between 'economic development' and 'environmental quality'. Under this framework, the general thrust of their development strategies are to promote economic development (and income distribution) from activities that are linked to conserving the natural environment and bio-diversity, as well as maintaining the variety of cultures and traditions that exist within the province.

Economic growth and development is also dependent upon having an educated and healthy labour force, which requires investments in the health and capacity of the people. There was a growing awareness of the close three-way linkage between economic and social development, and the development of transportation and communication networks, which are constrained by the terrain within the province. In improving these networks, the conservation of the environment and natural resources, as well the impact on cultural richness, must also be carefully considered.

The location in relation to the Myanmar border was also identified as becoming increasingly important. Both countries are becoming more involved in formal trans-border activities through cooperation in such forums as the Greater Mekong Sub-region.

In Mae Hong Son, the lack of accurate information and data is still a major constraint to setting clear strategic directions. This reflects a need to upgrade the basic database system, which informs the development of the provincial strategy and investment decisions.

The specific strategic themes and approaches are elaborated in more detail under each of the MDGs for Mae Hong Son province in the following sections.

The MDG context

The formulation and implementation of the provincial MDGs are guided by the framework established at the global and national levels, but specifically tailored to the conditions, context and priorities that make Mae Hong Son unique. This guiding framework is summarized below:

Globally:

Under the United Nations Millennium Declaration, the fundamental value of people-centred and sustainable human development is to be pursued under the principles of: freedom, equality, solidarity, tolerance, respect for nature and shared responsibility. These principles are to be pursued through the eight time-bound goals, 18 targets and 48 indicators.

Nationally:

Building on the achievements of reaching most of the MDGs, Thailand introduced the concept of MDG Plus, a set of tailor-made and ambitious development targets going well beyond the international MDG targets. This recognizes Thailand's past success in extending the coverage of social services to where the national challenge is to upgrade quality. Through its own formulation process, Thailand had adapted a number of the global targets and indicators to better reflect its own conditions and the more ambitious programme. Through the national MDG report, Thailand expressed its firm commitment to meet its obligations to the international community (MDG 8) as well as to its own citizens (MDGs Plus 1 to 7). Within its own MDG formulation efforts, Mae Hong Son has focused its attention on Goals 1-7 and does not address Goal 8 (global partnership for development). Through the formulation process, the Working Group has worked with both the global MDG and national MDG Plus reports and their associated targets and indicators to pursue the spirit, fundamental values and overall intent of the MDG framework. In addition to these values. the province also sought to observe the philosophy of 'Sufficiency Economy' bestowed by His Majesty the King on his subjects. 'Sufficiency Economy' is a philosophy that stresses the middle path as the overriding principle for appropriate conduct and way of life of the entire populace. It applies to conduct and way of life at individual, family, and community levels. The philosophy is consistent with a balanced development strategy that would reduce the vulnerability to shocks and excesses that may arise as a result of globalization.

The result has been a Provincial MDG Report that reflects the realities at the local level and thus uses a number of the targets and indicators where suitable and applicable from global and national levels, but also adapts them and introduces new ones that are more relevant to the unique local conditions and circumstances. The summary of this output is contained in the Section 2 with a more detailed presentation in Section 3.

Achieving the MDGs in Mae Hong Son Province

The situation of Mae Hong Son was scored against the MDG and MDG Plus Framework as a means to highlight priority areas for intervention. Mae Hong Son has identified the potential to achieve several MDGs, as well as some MDG Plus goals and targets. However, significant challenges still remain in reaching the Thailand MDG Plus targets in terms of overall poverty reduction, specific health issues, and achieving secondary education (see Figure 2.1 and Table 2.1).

Figure 2.1 Achieving the MDGs in Mae Hong Son Province

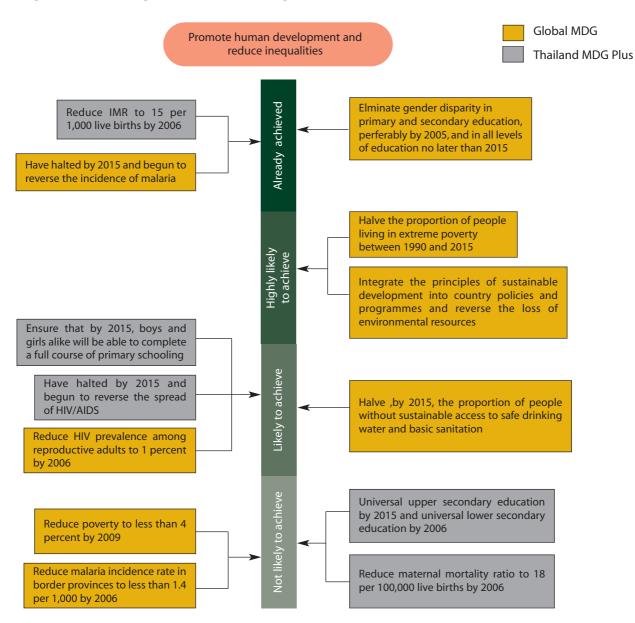


Figure 2.1 summarizes the potential and challenges that Mae Hong Son has in seeking to achieve both the global MDGs as well as the national MDGs Plus:

MDGs already achieved:

The province has already achieved two global MDG targets:

- (1) gender equality in terms of education; and
- (2) reducing by more than half the incidence of malaria during 1998-2003.

Mae Hong Son has already achieved one national MDG Plus, which is the reduction of IMR to less than 15 per 1,000 live births.

Highly likely to achieve:

It is highly likely that the province will achieve two global MDGs:

- (1) if it maintains current trends, it will see the proportion of people living in extreme poverty halved from 1990 levels by the year 2015; and
- (2) if principles of sustainable development are increasingly applied to its management practices.

Likely to achieve:

Mae Hong Son is likely to achieve three global MDGs and one national MDG Plus target. Those relating to the global MDGs include:

- (1) completion of primary schooling for both boys and girls;
- (2) begin to reverse the spread of HIV/AIDS; and
- (3) reduce by half the number of people without sustainable access to safe drinking water and basic sanitation.

The trends indicate that it is likely that, by 2006, the province will have reduced the prevalence of HIV among reproductive adults, thereby potentially meeting the national MDG Plus target.

Not likely to achieve:

There are no global MDG targets that fall into this category for Mae Hong Son. However, there are four national MDG Plus targets that the province is not likely to achieve:

- (1) reducing poverty to less than 4 percent by 2009;
- (2) reducing the incidence of malaria to less than 1.4 per 1,000 by 2006;
- (3) achieving universal secondary education by 2015; and
- (4) reducing the maternal mortality ratio to 18 per 100,000 live births by 2006.

It should be noted that targets aimed to improve the lives of slum dwellers cannot be applied to Mae Hong Son as there are no slum areas in the province. Moreover, some targets could not be properly assessed as there was insufficient and/or unreliable data to compare the trends. These targets relate to:

- (1) reducing the proportion of people who suffer from hunger;
- (2) reducing the under-five mortality rate; and
- (3) reducing the maternal mortality rate (see details in Section 3).

The process of identifying and subsequent 'scoring' of Mae Hong Son's potential vis-à-vis both the global and national MDGs has had the impact of raising awareness of a number of non-economic issues, which gives a framework for working towards specific time-bound targets on social and health issues. The process also reflected the need for additional and more reliable data and information, especially for minority groups within the province, as a basis to take further action.

Table 2.1 gives a more detailed overview of Mae Hong Son's potential in relation to both the global and national MDGs for seven of the goals and nine of the related targets.

Table 2.1 MDG Assessment in Mae Hong Son

			MAE HONG SON ASSESSMENT		
ISSUE		TARGET	Scorecard	Remarks	
Goal 1 Poverty	MDG	Target 1: Halve the proportion of people living in extreme poverty between 1990 and 2015	Highly likely to achieve	The proportion of poor people decreased from 30.63% in 1992 to 23.18% in 2002. If the trend can be maintained, the proportion could be halved by 2010.	
	MDG+	Reduce poverty to less than 4 percent by 2009	Not likely to achieve	Although Mae Hong Son could reduce more than half of the proportion of people living in extreme poverty, it is unlikely to be able to reduce this proportion from 23.18% in 2002 to less than 4% by 2009.	
Hunger	MDG	Target 2: Halve the proportion of people who suffer from hunger between 1990 and 2015	N/A (Could not be assessed)	Data is not available at provincial level (proportion of population below food poverty line). However, considering other available data such as prevalence of underweight children and prevalence of micro-nutrient deficiency among school-aged children, it was found that the situation was improved.	
Goal 2 Education	MDG	Target 3: Ensure that by 2015, boys and girls alike will be able to complete a full course of primary schooling	Likely to achieve	Net and gross enrolment ratio in primary education have become higher and closer to the goal; however, there should be more focus on retention and literacy rates.	
	MDG+	Universal lower secondary education by 2006 Universal upper secondary education by 2015	Not likely to achieve Not likely to achieve	Net and gross enrolment ratio in secondary and high school education is still far from the goal. This is attributable to the mountainous and geographical constraints, and inaccessible communication networks that limit accessibility to educational centres. This is compounded by the educational detriments originating from tribes' traditional, cultural and belief systems.	
Goal 3 Gender	MDG	Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	Already achieved	In primary education, male students had a slightly higher ratio than females, but this tended to become closer over time. At higher education levels, female students were better represented than males, especially at the university level.	
	MDG+	Double the proportion of women in the national parliament, Tambon Administrative Organizations, and executive positions in the civil service by 2006	N/A (Not considered applicable to Mae Hong Son)	There was minimal representation on provincial councils. Executive positions in the civil service are not under provincial authority to assign.	

ICCUE		TARGET	MAE HONG SON ASSESSMENT		
ISSUE		TARGET	Scorecard	Remarks	
Goal 4 Child health	MDG	Target 5: Reduce by two thirds, between 1990 and 2015, the under-five mortality rate	N/A (Could not be assessed)	Data is insufficient for assessment due to no data in the beginning years (1990-1995) to be compared; however, if considering data since 1992, its trend has decreased.	
	MDG+	Reduce IMR to 15 per 1,000 live births by 2006	Already achieved	The IMR is already low and lower than the goal, that of 2004 being 7.5 per 1,000 live births.	
		Reduce by half, between 2005 and 2015, the U5MR in highland areas	N/A (Could not be assessed)	No specific data related to highland areas is available at provincial level. The Mae Hong Son Provincial Public Health Office will plan to collect specific data in the highland areas.	
Goal 5 Maternal health	MDG	Target 6: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	N/A (Could not be assessed)	Data is insufficient for assessment due to no data in the beginning years (1990-1995) to be compared; however, if considering data since 1992, its trend has increased.	
	MDG+	Reduce maternal mortality ratio to 18 per 100,000 live births by 2006	Not likely to achieve	The MMR during 1996-2005 is higher than the target and its trend has increased. In 2005, it was 82.44 per 100,000 live births.	
		Reduce by half, between 2005 and 2015, the maternal mortality ratio in highland areas	N/A (Could not be assessed)	No specific data related to highland areas is available at provincial level. The Mae Hong Son Provincial Public Health Office will plan to collect specific data in the highland areas.	
Goal 6 HIV/AIDS	MDG	Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	Likely to achieve	The prevalence among pregnant women has decreased. However, after significant reduction, the overall rate has increased during 2002-2005. In 1995 the rate was 3.7% and decreased to 0.3% in 2002 and since then increased to 1.15% in 2004.	
	MDG+	Reduce HIV prevalence among reproductive adults to 1 percent by 2006	Likely to achieve	The prevalence rate among the reproductive population decreased. In 1995 it was 2.5% while that of 2004 was 0%. However, spreading still continues in some groups.	
Malaria, tuberculosis and heart disease	MDG	Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	Already achieved for malaria	The incidence of malaria decreased by more than half, reducing from 27.52 per 1,000 population in 1998 to 8.40 in 2004. Regarding tuberculosis, the trend is going up – this might partially be due to its linkage with HIV/AIDS.	
	MDG+	Reduce malaria incidence rate in 30 border provinces to less than 1.4 per 1,000 by 2006	Not likely to achieve	The 2004 malaria incidence rate of Mae Hong Son was 8.40 per 100,000 – much higher than the goal and thus offering little potential to reduce it as nationally targeted.	

ISSUE		TARCET	MAE	E HONG SON ASSESSMENT
ISSUE		TARGET	Scorecard	Remarks
Goal 7 Environment management	nment principles of sustainable		Highly likely to achieve	The various data on natural resources and environment highlighted the good environmental situation of the province, in terms of forestlands, conservation areas, air quality, as well as the provincial local fuel. Mae Hong Son has its own policy and plan related to natural resources management. However, policy and plan regarding pollution control are not clear.
renev 8 per comr energ		Increase the share of renewable energy to 8 percent of the commercial primary energy by 2011	N/A (Could not be assessed)	Data is not available at provincial level.
		Increase the share of municipal waste recycled to 30 percent by 2006	N/A (Could not be assessed)	Data is not representative of the amount of total municipal waste recycled in the province (only data in 5 municipal areas are provided).
Safe drinking water and sanitation	MDG	Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	Likely to achieve	More than 50% of MHS population have access to safe drinking water and more than 60% have sanitary toilets. This rate could be considered very high compared to 1990-2000 and it has tended to continually increase.
Secure tenure	MDG	Target 11: By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers (globally)	N/A (Not applicable to Mae Hong Son)	Mae Hong Son does not have any slum communities.

Remark: Levels of achievements are rated according to four categories: Not likely to achieve, Likely to achieve, Highly likely to achieve, and Already achieved

In assessing the development results of the province, the Working Group of Mae Hong Son has reconsidered the goals, targets and indicators of the global MDGs and MDG+ of Thailand. Those targets and indicators which have been adjusted and supplemented corresponding to the condition of Mae Hong Son are called 'Mae Hong Son MDGs', or 'MDGs Star'(MDGs*). However, MDGs* will not be reviewed in this report.

MDGs* were defined based on the concept that **global MDG targets** would be kept unchanged; only MDG+ Thailand targets were re-assessed. However, **indicators** from global MDG and MDG+ Thailand targets were adjusted and some indicators were added corresponding to the situation of Mae Hong Son. These are presented in Table 2.2.

MDG+ targets:

MDG+ targets were adjusted in terms of target's amount and/or target's year as follows: reduce poverty, increase educational enrolment

at the secondary and tertiary levels, increase the proportion of women at the executive level, and improve slum dwellers' quality of life. Moreover, one MDG+ target was deleted. This target was related to energy usage as there was no data available at the provincial level.

Indicators of MDG and MDG+:

There were some indicators which were deleted, adjusted and added in order to reflect the situation in Mae Hong Song. They are the following:

Deletions:

- indicators related to the northeastern provinces and three provinces in the southern regions;
- indicator related to mangrove areas;
- other indicators were deleted due to lack of data available at provincial level. These are: proportion of population older than 20 years of age below the minimum level of dietary energy consumption, ratio of girls to boys in selected fields in tertiary

education, rate of constant condom use of secondary school male students, HIV prevalence among injecting users, and share of renewable energy in commercial primary energy.

Adjustments:

- IT literacy of 15-24-year-olds changed to IT literacy rate of population age 11-24 years old;
- Proportion of seats held by women in national parliament changed to proportion of women in local council;
- Proportion of women in TAO and executive positions in the civil service changed to proportion of women in executive positions in local governments;
- Indicators related to highland areas such as IMR and MMR highland areas;
- Proportion of major rivers that do not meet DO, BOD and TCB standards changed to proportion of major and minor rivers that do not meet DO, BOD and TCB standards;

• Carbon dioxide emission and consumption of ozone-depleting CFCs changed to air quality in the community (dust and carbon dioxide) in the March-May period.

Additions:

- Rate of development of children under five years of age;
- Teacher-student ratio;
- Ratio of university-graduated women to men;
- Ratio of highland households with access to basic health services;
- Prevalence rate of respiratory infectious diseases (influenza and pneumonia);
- Prevalence rate of haemorrhagic fever and elephantiasis;
- Proportion of community forest area;
- Proportion of local government with sanitary solid waste management systems.

Table 2.2 MDG, MDG+ Thailand and MDG* Mae Hong Son

ISSUE		TARGET	INDICATOR
Goal 1 Poverty	MDG	Target 1: Halve, between 1990 and 2015, the proportion of people living in extreme poverty	Proportion of population below provincial poverty line Poverty gap ratio Share of poorest quintile in individual household income
	MDG+	Reduce poverty to less than 4 percent by 2009	Poverty severity
	MDG*	Reduce poverty to less than 12 percent by 2009	
Hunger	MDG	Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	Proportion of population below minimum level of dietary energy consumption Prevalence of underweight children (under five years old)
	MDG+		Prevalence of underweight highland children Prevalence of micro-nutrient deficiency (iodine and iron) among school-aged children
	MDG*		Rate of development of children under five years of age

ISSUE		TARGET	INDICATOR
Goal 2 Education	MDG	Target 3: Ensure that by 2015, boys and girls alike will be able to complete a full course of primary schooling	 Net and gross enrolment ratio in primary education Proportion of pupils starting Grade 1 who reach Grade 6 (retention rate) Literacy rate of 15 to 24-year-olds
	MDG+	Universal lower secondary education by 2006 Universal upper secondary education by 2015	 Net and gross enrolment ratio in lower and upper secondary education Retention rate in lower and upper secondary education National test scores of primary, lower and upper secondary students IT literacy of population age 11-24 years old
	MDG*	More than 90 percent of children completed lower secondary education by 2009 More than 70 percent of children completed upper secondary education by 2015	Teacher-student ratio
Goal 3 Gender	MDG	Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	Ratio of girls to boys in primary, secondary and tertiary education Ratio of literate women to men of 15 to 24-year-olds Share of women in waged employment in non-agricultural sectors Proportion of seats held by women in local council
	MDG+	Double the proportion of women in the national parliament, Tambon Administrative Organizations, and executive positions in the civil service by 2006	Ratio of literate women to men over 40 years old
	MDG*	Increase the proportion of women in executive positions in the local authorities	Ratio of university-graduated women to men Proportion of women in executive positions in the local governments
Goal 4 Child health	MDG	Target 5: Reduce by two thirds, between 1990 and 2015, the under-five mortality rate	Under-five mortality rate (U5MR) Infant mortality rate (IMR) Incidence rate of children under five years old associated with measles
	MDG+	Reduce IMR to 15 per 1,000 live births by 2006 Reduce by half, between 2005 and 2015, the U5MR in highland areas, selected northern provinces and three southernmost provinces	IMR in highland areas
	MDG*	Reduce IMR to 15 per 1,000 live births by 2006 Reduce by half, between 2005 and 2015, the U5MR in highland areas	
Goal 5 Maternal health	MDG	Target 6: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	Maternal mortality ratio (MMR) Proportion of births attended by skilled health personnel
	MDG+	Reduce maternal mortality ratio to 18 per 100,000 live births by 2006	Maternal mortality ratio in highland areas
		Reduce by half, between 2005 and 2015, the maternal mortality ratio in highland areas, selected northern provinces and three southernmost provinces	

ISSUE		TARGET	INDICATOR	
Goal 5 Maternal health	MDG*	Reduce maternal mortality ratio to 18 per 100,000 live births by 2006 Reduce by half, between 2005 and 2015, the maternal mortality ratio in highland areas	Highland household ratio in accessing basic health services	
Goal 6 HIV/AIDS	MDG	Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	HIV prevalence among pregnant women Number of children orphaned by AIDS	
	MDG+	Reduce HIV prevalence among reproductive adults to 1 percent by 2006	HIV prevalence among reproductive adults	
Malaria, tuberculosis and heart disease	MDG	Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	Incidence and death rates associated with malaria Prevalence and death rates associated with tuberculosis Proportion of tuberculosis cases cured under DOTS	
	MDG+	Reduce malaria incidence rate in 30 border provinces to less than 1.4 per 1,000 by 2006	Prevalence and death rates associated with heart disease	
	MDG*	Reduce malaria incidence rate in to less than 1.4 per 1,000 by 2006	Prevalence rate with respiratory infectious disease (influenza and pneumonia) Prevalence rate with haemorrhagic fever Prevalence rate with elephantiasis	
Goal 7 Environment management	MDG	Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	Proportion of land area covered by forest Ratio of area protected to maintain biological diversity to surface area Proportion of population using solid fuel (i.e. fuel wood, charcoal)	
	MDG+	Increase the share of renewable energy to 8 percent of commercial primary energy by 2011 Increase the share of municipal waste recycled to	Proportion of major and minor rivers that do not meet DO, BOD and TCB standard Proportion of municipal waste recycled	
	MDG*	30 percent by 2006 Increase the share of municipal waste recycled to 30 percent by 2006	Proportion of community forestry area Proportion of local governments with sanitary solid waste management	
Safe drinking water and sanitation	MDG	Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	 Proportion of urban and rural population with sustainable access to improved water source Proportion of urban and rural population with access to improved sanitation 	
Secure tenure	MDG	Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers (globally)	Proportion of households with access to secure tenure (owned, leased or rented)	
	MDG*	Significant improvement in quality of living areas	Proportion of households with healthy lodging and dwelling places	

Report on Mae Hong Son's Millennium Development Goals 1-7

GOAL 1: ERADICATE EXTREME POVERTY AND HUNGER

MDG TARGET 1: Halve, between 1990 and 2015, the proportion of people living in

extreme poverty

MDG PLUS: Reduce poverty to less than 4% by 2009

Mae Hong Son Scorecard

Highly likely to achieve the MDG target Not likely to achieve the MDG Plus target					
Indicator	1992	1994	1996	2000	2002
Proportion of population below provincial poverty line (%)	30.63	48.17	43.06	27.96	23.18

Source: NESDB

Data Rating

Data quality, reliability	Data continuity
***	***

Mae Hong Son MDG Target

Reduce poverty to less than 12 percent by 2009

The poverty situation

On an aggregate level, from 1994 to 2002, significant progress has been made in reducing poverty in Mae Hong Son in terms of the key poverty indicators, especially the poverty line¹, where it dropped by over one half from a high of 48.17% to 23.18% respectively. Should this trend continue, it would be expected that Mae Hong Son will achieve the MDG target of halving the proportion of people living in extreme poverty between 1990 and 2015. When comparing these results to the national situation for the same period, the percentage of people below the poverty line dropped from 16.3% to 9.8%, reflecting a substantial gap between the situation in the province and the national standards.



"OTOP of Mae Hong Son Province"

Mae Hong Son's poverty situation and trends are consistent with the average household income trends. From the Minimum Basic Needs Survey (BNS) conducted by the Mae Hong Son Provincial Community Development Office, it was found that the proportion of household income was lower than the national BNS (20,000 baht per person per year) tending to continuously decline from the previous point of 85.6% in 1992, when the proportion of households with average income lower than basic needs changed to 78.9% and 61.2% in 1997 and 2004, respectively.

It should be noted that Thailand's poverty line² is currently under consideration to be adjusted to reflect basic necessities consistent with current living conditions. The monitoring of these results, however, will still be based on the old poverty line until a new officially adjusted one is applied.

Other indicators (e.g. poverty gap, the share of the poorest quintile in individual household income and the poverty severity) revealed that Mae Hong Son's poverty situation has improved.

It should be noted that the above situation reflects the overall picture within Mae Hong Son. As such, the specific circumstance of highland groups and other minorities is not separately identified, creating potential gaps in coverage of groups with special needs

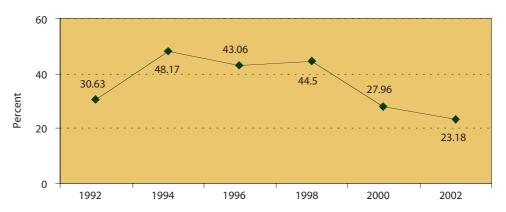


Figure 3.1 Proportion of population below poverty line, 1992-2002

Source: NESDB

The poverty line is a measure of the level of income below which one cannot afford to purchase all the resources one requires to live, such as food, clothing, shelter and medicines. Therefore, estimation of all basic necessities in terms of cash value is required to identify the capacity of a person's income to meet expenses and purchase all basic necessities. The poverty line varies from place to place and from time to time depending on the cost of living and people's expectations. However, the poverty line is not the sole indicator of poverty as poverty depends on many factors. This is especially true in Mae Hong Son, where most people do not necessarily need high incomes because they can take advantage of the rich natural resources available in the province.

The poverty evaluation is based on the poverty line as generally applied at the macro level (country and regional levels). It has typically never been applied at the provincial level due to the fact that sampling groups are rather limited and the co-efficient to be applied in the calculation of the poverty line is not compatible with the provincial data and situations. However, the NESDB was able to conduct the poverty evaluation at the provincial level based on existing data and found that Mae Hong Son's poverty line was much lower than that of the nation. According to 2002 data, which are the most current, Mae Hong Son's poverty line is 810 baht per person per month, while the national poverty line is 922 baht per person per month.

The poverty challenges

While Mae Hong Son will likely achieve the MDG poverty target, there is very little likelihood of achieving Thailand's MDG Plus target. With the poverty situation in Mae Hong Son remaining a serious problem when compared to the rest of the country, there is a large gap that needs to be overcome to achieve the national goal. Therefore, the poverty target of Mae Hong Son will likely be reconsidered.

As noted, Mae Hong Son still remains categorized as being among the country's poorest provinces. Owing to that, Mae Hong Son has thus placed high significance on economic development and, accordingly, has formulated relevant strategies and allocated budget for the increase of incomes in various ways, such as emphasizing tourism, border trade and OTOP promotion. With such emphasis being placed upon economic growth, challenges exist to more fully integrate social development and environmental protection more fully within the overall development strategy of the province.

The poverty strategic themes and approaches:

Within its Provincial Development Plan, Mae Hong Son has set a new target for poverty reduction to less than 12% by the year 2009. To accomplish this requires a clear strategy as well as cooperation and integration among related organizations and agencies. There is also a need for support from various government levels. The thrust of their strategy focuses on 'self-sufficiency and self-reliance' by creating opportunities and security in occupations and incomes, increasing access to, and use of, natural resources with equity and increasing the capacity of local people.

The key poverty reduction themes and approaches are as follows:

Agricultural development and diversification:

- Diversification of the economic base will be pursued in line with the principles of sustainable development;
- Further promotion of organic farming produce for export;
- This will be supported by providing additional water sources for agricultural areas; and
- Identifying and ensuring land rights for farmers.

OTOP development and promotion:

- Develop and promote local knowledge and wisdom in production based on the concept of 'One *Tambon* (sub-district) One Product' (OTOP): and
- Develop associated markets for the various products.

Eco-tourism enhancement and promotion:

- Build upon the perceived quality of environment, bio-diversity and climate to more systematically promote development of the eco-tourism industry;
- Build a 'bridge' between business, government, environmental groups and local communities (including highland areas) to promote sustainable eco-tourism (holding forums, capacity building, information sharing) that provides greater opportunity as well as better equity in income distribution from such activities;
- Support cultural diversity as practiced among the various communities and promote the 'cultural mosaic' of the province as part of the eco-tourism component;
- Promote adoption of land use controls to protect historically and culturally important monuments/sites and immediate areas and to manage urban/tourism expansion areas so as to match with infrastructure investments and environmental carrying capacity.

Build local level capacity:

- Increase capacity of the local community in poverty reduction by surveying people living in poverty and providing them help in their own villages, including village fund management and providing opportunities to access funds and, build technology transfer centres in the villages;
- Build knowledge and capacity of local government authorities and communities in tourism management that is appropriate for their own lifestyle and participate and receive an equitable sharing in the benefits from such activities;

Strengthen rural/urban linkages:

 Expand the transportation and communication network throughout the province. Such action should target areas to facilitate both economic growth and social development through strengthening urban-rural linkages, potential for resource use and development, and access to basic health and education services for the rural poor. MDG TARGET 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

MDG PLUS: -

Mae Hong Son Scorecard

Could not be assessed*						
Indicators	1996	1998	2000	2002	2004	
Proportion of population below provincial food poverty line* (%)						
Prevalence of underweight children under five years old (%)	20.18	17.42	13.59	17.28	16.26	

Source: Mae Hong Son Provincial Public Health Office

Data Rating

Data quality, reliability	Data continuity
*	*

Remark: This data rating is for indicator of 'Proportion of population below provincial food poverty line' as it is the main indicator of this target.

Mae Hong Son MDG Target

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^{*} To assess the state of nutrition at country level, 'Proportion of population below country food poverty line', from NESDB, was used. Therefore, in Mae Hong Son Province, 'Proportion of population below provincial food poverty line' was also applied. However, data is not available at provincial level. As it is the main indicator for this target and no data at provincial level is available, this target could not be assessed. But, when considering other complementary indicators, 'Prevalence of underweight children' and 'Prevalence of micro-nutrient deficiency, it was found that hunger is not the main problem of Mae Hong Son and its trend in school-age children was improved (details in Annex III).

The hunger situation

Hunger is very closely related to poverty. However, when attempting to evaluate the hunger situation as a separate component in Mae Hong Son, it was found that there is very limited data available. As a result, this target cannot be properly evaluated at the present time. The proportion of population 'older than 20 years below minimum level of dietary energy consumption' was not applied, as data does not exist at the provincial level for this indicator. However, one additional indicator was added in order to complete the quality of nutrition of children, which is the 'rate of development of children under five years'.

The ratio of underweight children under five years old in Mae Hong Son tended to decrease. This is likely reflective of the ongoing initiatives to promote improved nutritional conditions among children. However, the ratio is still lower than the criterion set in the goal of the Ninth Plan of MOPH, which indicated that the under five children rate with standard weight should be not less than 93%; or the number of underweight children under-five years of age should not be more than 7%. Mae Hong Son's nutrient consumption is adequate in iodine and iron, which reflects a trend of improvement. The iodine deficiency rate is not more than 5%, and anaemia does not exceed 10%.

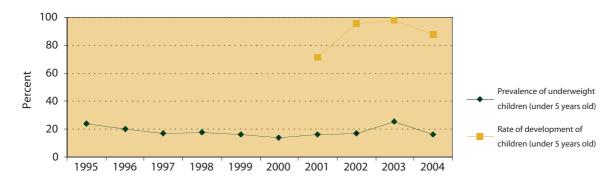


A highland mother feeds her child

The hunger challenges

On the average, the nutritional conditions of the under-five children in Mae Hong Son do not appear to be a major problem. However, children in the highland areas may still suffer from malnutrition, but no confirmation from existing data is available. Mae Hong Son Provincial Public Health Office has a plan to collect data in these areas so as to provide a guideline for future planning in the promotion of highland children's health. One of the contributing factors is lack of awareness especially among the most vulnerable groups.





Sources: Mae Hong Son Provincial Public Health Office

The hunger strategic themes and approaches

As there is insufficient data available, especially for highland areas, formulating a clear set of strategies is not realistic. In this regard, the main thrust of the provincial priorities will be to establish an accurate database in order to properly assess the situation. However, awaiting accurate data still does not alleviate the necessity for taking a proactive approach as there is some evidence of a problem relating to hunger. Therefore, pending a clear indication of where key inputs should be directed, a general awareness raising campaign will be developed.

The key hunger reduction themes and approaches are therefore:

Survey and monitoring of nutritional status and requirements of children and expectant women:

 The highland areas and vulnerable groups will be especially targeted. The strategy is to establish a baseline and conduct regular surveys for accurate and up-to-date data in order to provide appropriate nutrition monitoring mechanisms.

Nutrition education:

 Formulating and conducting public education campaigns on proper nutrition for better health programnes to increase awareness.

GOAL 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION

MDG TARGET 3: Ensure that, by 2015, boys and girls alike will be able to complete

a full course of primary schooling

MDG PLUS: Universal lower secondary education by 2006; and

Universal upper secondary education by 2015

Mae Hong Son Scorecard

Likely to achieve the MDG target
Not likely to achieve the MDG Plus targets

Indicators	1994	1996	1998	2000	2002	2004
Net enrolment ratio in primary education (%)	95.40	87.34	92.55	95.25	93.24	87.40
Gross enrolment ratio in primary education (%)	121.33	118.61	120.08	118.93	116.37	114.92
Net enrolment ratio in lower secondary education (%)			40.12	45.72	45.74	
Gross enrolment ratio in lower secondary education (%)	47.37	54.79	59.19	67.50	67.20	74.30
Net enrolment ratio in upper secondary education (%)			25.21	24.43	24.13	
Gross enrolment ratio in upper secondary education (%)	19.28	25.71	30.69	33.86	37.95	41.74

Source: MOE

Data Rating

Data quality, reliability	Data continuity
***	***

Mae Hong Son MDG Target

More than 90 percent of children complete lower secondary education by 2009 More than 70 percent of children complete upper secondary education by 2015

The education situation³

In terms of primary education, Mae Hong Son Province nearly meets the MDG target and is overall more progressive than the national level. Net enrolment at the primary level has been near 90% since 1994. However, this has slightly decreased since 2000 where net enrolment in 2004 was down to 87.40%. On the other hand, gross enrolment at the primary level has been over 100% since 1994, (ranging between 112-120%) for the past ten years, but slightly decreasing since 2000 to where, by 2003, gross enrolment was 114.92%. The ways in which this can be higher than 100% is due to the fact that 'official' enrolment figures take into account only school-aged children who have a 13-digit national identity number. In reality, a number of enrolled students do not have such an identity number (e.g. in 2004, there were 3.427 such students out of 47.490 at the elementary level)4.



School in remote area

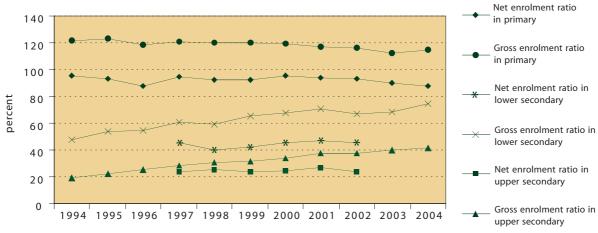
Secondary education in Mae Hong Son Province is less progressive than primary education and is farther behind national trends for meeting the target. In 2002, net enrolment at the secondary and high school levels were 45.74% and 24.13% respectively, whereas gross enrolment in 2004 was 74.30% and 41.74% respectively. Gross enrolment at the secondary level, especially the upper secondary level, is low because of the practice of sending children to schools in other provinces without transferring their names from civil registration. Consequently, the ratio of students to school-aged population is lower than reality. Moreover, as most of the secondary schools are located in the urban areas, children in remote areas often miss learning opportunities.

Student retention rates at primary, lower secondary, and upper secondary levels in 2004, were 75.57%, 88.04% and 88.34%, respectively. In Mae Hong Son, this is partly due to there being as many as nine hilltribes, with various traditions and cultures that are further limited by geographical conditions and limited transportation linkages.

According to the 2000 Population and Household Census, the literacy rate⁵ of 15 to 24-year-olds was 74.88%, increasing slightly from 71.21% in 1990, yet still remains lower than the national literacy rate of 98% for the same year.

Regarding quality assessment of Mae Hong Son's education, test scores of Thai, English, mathematics and science subjects of primary students tended to decrease, but were still close to national test score averages. Upper

Figure 3.3 Enrolment in Mae Hong Son schools, 1994-2004



Source: Calculated from MOE and DOPA data

³ In terms of education, the MDG+ target was adjusted due to the topography of Mae Hong Son which limits access to education services. Further, one indicator, teacher-student ratio, was added due to fact that there are a large numbers of educational personnel transferred, which has become a main problem of education in Mae Hong Son.

Mae Hong Son Provincial Education Office Region 1 and Region 2

⁵ Literacy represents ability to read and write simple passages by a person who is 6 years of age and up. According to the definition given by the National Statistical Office in 2000, if one can only read a language, but cannot write, he is illiterate.

secondary students' test scores of every subject but science tended to increase. However, every subject's test scores for Mae Hong Son students were lower than national test scores.

The ratio of teachers to students is another factor reflecting the development opportunity for a more efficient education system. The teacher-student ratio specified in a Ministerial Council Resolution (27 January 1998), provided for a 1:25 at every level. However, the teacher-student ratio in Mae Hong Son for primary and lower secondary levels tended to continuously increase to where the teacher-student ratios were 1:24 and 1:25, respectively in 2004. The teacher-student ratio in the upper secondary level was close to the criteria, but in 2004, the ratio exceeded the standards, as did the ratio for the upper secondary level (vocational).

Information Technology (IT) literacy reflects a new frontier of building a knowledge-based society, however, no data related directly to IT literacy rate is available at present. Reference was made to the proportion of youth aged 11-24 years who have computer skills. Initially, data was collected in 2003 and is being collected every five years. In 2003, 16.28% of 11 to 24-years-old youth had computer skills and most had access to information technology at school (62.73%)⁶.

The education challenges

Net enrolment at primary level in Mae Hong Son is highly likely to be achieved while secondary enrolment levels are quite limited. Therefore, Mae Hong Son province would appear to have a moderate need to emphasize primary education and urgent need to develop its secondary education programne in order to move closer to the national MDG Plus targets. The working group has adjusted their own targets that are more than 90% of children complete lower secondary education by 2009 and 70% for upper secondary education by 2015.

Education development in Mae Hong Son is linked to the limitation of accessibility (e.g. roads and communications networks), especially in the remote areas, and children from poor families have to spend time travelling. The geography of Mae Hong Son province is in itself a very limiting factor to offering wider educational coverage. The mountainous terrain limits easy access of many communities to a number of services including education facilities that tend to be predominantly in the town areas. As such, educational development will likely be closely linked with economic growth as transportation and other economic infrastructure open up in currently remote areas.

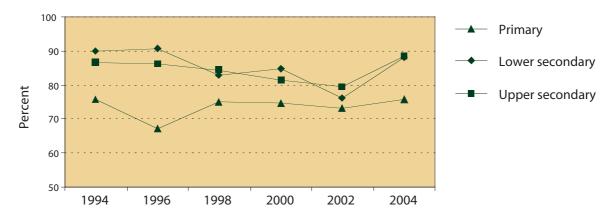


Figure 3.4 Retention rates in primary and secondary school, 1994-2004

Source: Calculated from MOE and DOPA data

⁶ 2003 Survey of Children and Youth, NSO

The primary and the primary an

2002

2000

2002

2004

Figure 3.5 Teacher-student ratio in primary and secondary school, 1994-2004

Source: Calculated from MOE and DOPA data

1996

1998

1994

The current trend in teacher-student ratios indicates a problem. The insufficient number of teachers has an overall effect on education quality of the province and is directly affected by the ongoing transferring of education personnel.

2000

The level of unregistered immigrants is also potentially overburdening the school system, especially since financial education grants from the centre are based on 'registered population' and not actual figures.

The education strategic themes and approaches

The thrust of education strategies has a dual theme of emphasizing enrolment at all levels while also improving the overall quality of education.

Increasing opportunities and equality in accessing education services:

- Improve data collection on the number of school-children in all areas, and follow up on key geographic areas and social groups to ensure school enrolment;
- Through information campaigns, promote the importance of education, and especially emphasize higher level education as a means to help raise family income and quality of life;

- Provide and support the costs associated with education for poor families to reduce their education expenses;
- Cooperating with government and/or private organizations to provide scholarships for lower income families.

Increase the education quality:

- Enhance capacity of education personnel to provide educational services that are child centred;
- Retain qualified personnel by increasing remuneration and other incentives for the teachers who work in the remote areas;
- Develop local capability by campaigning for local people to work as teachers in their own areas;
- Establish baselines to assess education standards and evaluate ways and means to increase the quality of education;
- Expand electrical and telecommunication services to every school in the province including the upgrading of roads and other transportation networks to strengthen the rural-urban linkages and physical access to schools;
- Promote the use of information technology in the education process;
- Develop tailored curricula appropriate to the local needs and lifestyles.

GOAL 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

MDG TARGET 4:	Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015
MDG PLUS:	Double the proportion of women in the national parliament, Tambon Administration Organizations, and executive positions in the civil service by 2006

Mae Hong Son Scorecard

Already achieved the MDG target
The MDG Plus targets are not applicable to the provincial level;

Indicators	1994	1996	1998	2000	2002	2004
Ratio of girls to boys in primary education	0.90	0.92	0.93	0.90	0.92	0.92
Ratio of girls to boys in secondary education	0.91	0.97	1.01	1.06	1.07	1.10
Ratio of girl to boys in tertiary education			1.86	1.70	1.54	

Source: MOE

Data Rating

Data quality, reliability	Data continuity
***	***

Mae Hong Son MDG Target

Increase the proportion of women in executive positions in the local authority

The gender equality situation

In terms of gender parity in the education system, it was found that girls and boys appeared to have comparable opportunities at the primary level. For example, during the period 1990 to 2004, the girl to boy ratio was in the range of 0.89-0.92. At higher educational levels, it was found that girls had higher enrolment than boys from 1998 onwards. Women in Mae Hong Son, at the university undergraduate level, have an equal or a slightly higher opportunity to study than men. It could generally be said that Mae Hong Son had already achieved the gender parity in terms of education.

In terms of literacy, women in Mae Hong Son were less literate than men in two groups: 15-24 and over 40 years of age. In 2000, the ratios were 0.90 and 0.80, respectively. However, in comparison with the country's overall picture, it was found that the gender parity of Mae Hong Son was still below that of the country: in 2000, the country's woman-man literacy rate for the population of 15-24 years of age was equal to 1, or there was no difference among women and men, and that for the population of 40-up years of age was 0.9. This difference might be due to local cultural factors that did not favour education for women, especially those who are now in the over 40 age bracket.

During the period 1996 to 2004, it was revealed that for waged employment in the non-agricultural sector, women were less represented than men. Additionally, the data available on employment in the non-agricultural sector fluctuated dramatically, thus limiting the ability to render an accurate forecast and assessment. In general, when compared to the country's situation, Mae Hong Son's proportion was typically lower, where based on the country's latest data from 2000, the country's proportion of women employed in the non-agricultural sector was 46.1% while that of Mae Hong Son was 41.02%.

The gender parity in terms of political roles using 2001's proportion of seats held by women in local councils⁸ and proportion of women in executive positions⁹ in the local governments, which data from all local governments¹⁰ provided for only 2005, found that women in Mae Hong Son had minimal participation in such political capacities. However, when compared to that of the country, Mae Hong Son was 9.04% while that of the country's parliament in 2000 and 2001 was 7.2% and 9.6% respectively. The proportion of women holding executive positions in Mae Hong Son's local governments was 3.97%.

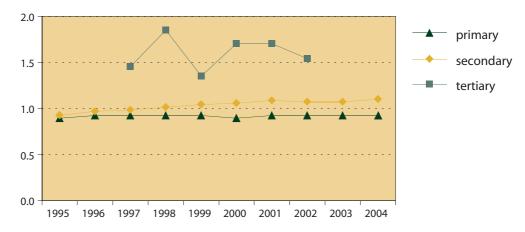


Figure 3.6 Ratio of girls to boys in primary, secondary and tertiary facilities

Source: Calculated from MOE data

⁷ The data utilized was based on information acquired from the Report of Labor Force Survey by NSO, which had changed its data collecting system in 2001. Because of this, pre-2001 data could not be effectively compared with data from 2001 onwards. While another source of this data exists from NESDB, this data is at the national level only with no provincial level information available.

⁸ Local councils representing all provincial administration organizations (PAO), municipal councils and tambon administration organizations (TAO).

Executive positions representing chairmen and vice-chairmen of PAO, municipal mayors and deputy mayors, presidents and vice presidents of TAO, and chairmen and vice chairmen of local councils.

There are totally 50 local government organizations in Mae Hong Son Province.

The gender equality challenges

Gender equality in terms of education in Mae Hong Son appears already achieved. Opportunities for girls and boys in Mae Hong Son to receive education were generally the same, especially above the primary levels. However, in selected population groups (over 40 years age), it was found that the literacy rate of women was less than men, requiring special emphasis.

Opportunities for women in Mae Hong Son to be able to work in the non-agricultural sector, representing gender parity in terms of ability to earn higher wages and higher social recognition, need to be further developed.

Opportunities for women to have political and executive roles were still minimal. This might be due to local cultural factors that did not make available opportunities for women to take part more actively. Mae Hong Son also has its own target to increase the proportion of women in executive positions of local administration.

The gender equality strategic themes and approaches

The thrust of Mae Hong Son's strategies in this area are primarily on awareness raising. Targets of such campaigns are both the general population as well as attempting to increase literacy and productive capacity of women in the over 40 age bracket. Gender equality strategies can thus be outlined as follows:

Increase awareness of women's potential:

- Through general awareness raising campaigns, adjust the attitude of women to realize and believe in their own worth, as well as address the attitude of men to promote women's opportunity within the local cultural context;
- Take a proactive approach to further develop skills and knowledge of women and increase opportunities for them to work in the local areas.



Source of employment in traditional communities - employment

Increase the education opportunities of women over 40 years old:

 Expand the informal education system to increase the opportunities of this group to have access to education and skill development, especially in the remote areas.

Promote women's participation in community affairs:

- Introduce campaigns to support women's participation in public affairs;
- Develop training programmes to increase capacity and leadership conditions for women who want to work in public affairs and enter politics;
- Build acceptance within the provincial and local government sector, local political parties, private sector and general public to include and support women's participation in the decision-making process.

GOAL 4: REDUCE CHILD MORTALITY

MDG TARGET 4: Reduce by two thirds, between 1990 and 2015, the under-five mortality ratio

MDG PLUS: Reduce IMR to 15 per 1,000 live births by 2006; and Reduce by half, between 2005 and 2015, the U5MR in highland areas, selected northern provinces and three southernmost provinces.

Mae Hong Son Scorecard

Could not be assessed for the MDG target *
Already achieved MDG Plus target #1 and could not be assessed for MDG Plus target 2 **

Indicators	1994	1996	1998	2000	2002	2004
Under-five mortality rate per 1,000 live births		19.52	19.62 (1997)	19.24	15.21	
Infant mortality rate per 1,000 live births		6.07	3.96	10.82	8.03	7.54

Source: Bureau of Policy and Strategy, MOPH

Data Rating

Data quality, reliability	Data continuity
***	****

Mae Hong Son MDG Target

Reduce IMR to 15 per 1,000 live births by 2006
Reduce by half, between 2005 and 2015, the U5MR in highland areas

 $^{^{*}}$ Data is insufficient due to no data in the beginning year (1990) was provided for assessment for assessment

^{**} Data is not available at provincial level

The child mortality situation

The under-five mortality rate (U5MR) in Mae Hong Son has tended to show a decrease from 19.52 per 1,000 live births in 1996 to 12.18 in 2005. The infant mortality rate (IMR) of Mae Hong Son is already low. Its rates were 6.07, 10.80 and 7.54 per 1,000 live births in 1996, 2000 and 2005, respectively. The most recent IMR for Mae Hong Son is significantly below the level set by the Ninth plan of the MOPH that determined the rate should not exceed 15 per 1,000 live births. This is a reflection of the improvement in health service provision together with the initiatives in maternal and child health promotion.

The causes of death of the majority of the U5MR cases of Mae Hong Son were from pneumonia, intestinal infections, diarrhoea, unidentified fevers, malaria and unidentifiable causes. For the IMR, the major causes of death were similar to those of U5MR, which were unidentifiable causes, pneumonia, intestinal infection, diarrhoea, unidentifiable fevers and cardiac diseases.¹¹

The incidence of measles spreading among the under-5 group in Mae Hong Son still remained high. According to the MOPH's target related to Thai children's health, the incidence rate of measles should be less than 50 per 100,000 population and there should be no measles-related death. However, the illness rate associated with measles among the under-5 population of Mae Hong Son in 1997 was considerably higher at 518.53 per 100,000 infants with the rate decreasing to 64.34 and 48.27 in 1998 and 1999, respectively. However, it drastically increased once more in 2002 possibly due to certain groups of infants not receiving measles vaccinations.

Due to Mae Hong Son's difficult terrain, health services have problems providing effective coverage to all the population, especially in the highland areas. To date, data related to province-specific health and sanitary conditions of the highland communities have not been specifically collected. The Mae Hong Son Provincial Health Office is working to cover most of the province and has set up a health data system for highland communities.

2003

2004

2002

Under-five mortality rate

Infant mortality rate

2001

Figure 3.7 Under-five mortality rate and infant mortality rate

1998

1997

1999

2000

Source: Bureau of Policy and Strategy, MOPH

1995

1996

0

Approximation is based on death information classified in accordance with age, sex and cause during 1996-2002, from the Bureau of Policy and Strategy, MOPH (http://203.157.19.191/recover_death_bps.htm)

The child mortality challenges

While the province has already achieved the MDG Plus of reducing IMR to below 15 per 1,000 live births, other health challenges remain. It can be seen that measles could remain a problem for the under-5 population in Mae Hong Son. Additional inputs are needed both in coverage and awareness raising regarding the importance of timely vaccinations.

The highlanders' access to public health still remains a major problem in Mae Hong Son. Like education and access to employment opportunities, access to health services is constrained by the limited transportation and communication networks.

Compounding the situation is lack of information and data, especially regarding the child health situation of hilltribe populations. While some data collection systems are planned for implementation in 2006, significantly more detailed information is needed on this segment of the population in order to more effectively address their health needs.

In Mae Hong Son, issues of child mortality and maternal health are closely linked. As such, while each component is separately discussed in terms of situation and challenges, the resulting strategic themes and approaches will be jointly presented at the end of Goal 5 – Maternal Health.

GOAL 5: IMPROVE MATERNAL HEALTH

MDG TARGET 6: Reduce by three quarters, between 1990 and 2015,

the maternal mortality ratio

MDG PLUS: Reduce maternal mortality ratio to 18 per 100,000 live births by

2006; and

Reduce by half, between 2005 and 2015, the maternal mortality ratio

in highland areas, selected northern provinces and the three

southernmost provinces

Mae Hong Son Scorecard

Could not be assessed for the MDG target *
Not likely to achieve MDG Plus target 1 and Could not be assessed for MDG Plus target 2 **

Indicators	1994	1996	1998	2000	2002	2004
Maternal mortality ratio (per 100,000 live births)		26.38	76.10	30.06	55.33	82.44

Source: Bureau of Policy and Strategy, MOPH

Data Rating

Data quality, reliability	Data continuity
***	****

Mae Hong Son MDG Target

Reduce maternal mortality ratio to 18 per 100,000 live births by 2006
Reduce by half, between 2005 and 2015, the maternal mortality ratio in highland areas

^{*} Data is insufficient as no data in the beginning year (1990) was provided for assessment for assessment

^{**} Data is not available at provincial level

The maternal health situation

The overall maternal mortality ratio of Mae Hong Son is still high and it has increased. The rates were 26.38, 30.06 and 82.44 per 100,000 live births in 1996, 2000 and 2005, respectively. The rates are significantly higher than the criteria set by the Ninth Plan of the MOPH that indicated that the maternal mortality rate (MMR) should not be in excess of 18 per 100,000 live births. Mae Hong Son Provincial Health Office has recognized the seriousness of the problem.

The proportion of births attended by skilled health personnel has increased over time, though still remains low when compared to national averages and represents an ongoing issue. The pregnancy care services and the births attended by skilled health personnel, as well as improved nutritional conditions, positively impacted both pregnant women's and infants' health.

Potential sources of the problems might relate to the lack of women's health officers, especially in remote areas where transportation and communication are difficult. It is especially true in highland areas where accessibility to public health services and maternal care by public health personnel remain lowest. However, to date, data related to maternal and infant health in highland areas are not differentiated as the data currently in place relates to the overall health situation of Mae Hong Son on an aggregate basis.

Figure 3.8 Maternal mortality ratio

100 82 44 80 Per 100,000 live births 60 40 31.85 20 0 2004 1996 1997 2000 2001 2002 2003 1998 1999

Source: Bureau of Policy and Strategy, MOPH

The maternal health challenges

The maternal mortality rate, although fluctuating widely, remains a major concern for Mae Hong Son to the point where there is little potential to reach Thailand's MDG Plus target.

Mae Hong Son has expressed its intention to reduce the child mortality rate from the present, with a resulting decrease in the overall trend. However, the MMR of Mae Hong Son is still high, with no potential to reduce it to MOPH's standard (18 per 100,00 live births).

The major cause of child and maternal mortality in Mae Hong Son is difficulty in accessing public health services, particularly in the remote and highland areas. Moreover, lack of public health personnel is also another cause of providing insufficient public health services to the people.

While much of the problem appears to be related to highland areas, accurate data remains a problem in making an assessment of the real causes. In addition to problems of providing access to healthcare facilities, there is the issue of trained healthcare professionals to attend maternal to health requirements.



Maternal and child health remains a challenge in highland areas

The child mortality and maternal health strategic themes and approaches

Strategies for addressing the challenges under Goals 4 and 5 are closely linked in the case of Mae Hong Son and are jointly presented. The thrust of this integrated strategy requires three interlinked components: building an accurate database system, increasing capacity of public health personnel, and taking a more proactive approach to delivering health services.

Public health strategic themes and approaches for Mae Hong Son are:

Conduct surveys and prepare database systems for child and maternal health:

Accurate information is needed in order to adequately respond to situations on a geographic or cultural basis. MHS is developing a framework to undertake surveys and data collection to differentiate between plain and highland areas. This approach will assist in identifying potential specific problem areas and help to understand the causes of any problems in order to provide appropriate responses and a subsequent monitoring programme.

Increase capacity of public health personnel:

- Develop a specialized training programme related to child and maternal health issues: and
- Provide incentives to healthcare personnel who work in the remote and highland areas.

Proactive public health services:

- Provide basic public health services to the people in the remote and highland areas;
- Provide awareness raising and access to information, especially among the most at-risk segments of the population through formulation and delivery of an education package for parents on effectively taking care of child and maternal health;
- Institute mobile public health services to expand the health service area coverage;
- Provide training to representatives at the village or community levels to supply basic services that help cover highland areas;
- Facilitate access to services by developing transportation and communication networks that facilitate movement of people and services.

GOAL 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES

MDG TARGET 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

MDG PLUS: Reduce HIV prevalence among reproductive adults to 1% by 2006

Mae Hong Son Scorecard

Likely to achieve the MDG target Likely to achieve the MDG Plus target

Indicators	1996	1998	2000	2002	2004
HIV prevalence among pregnant women (%)	5.1	1.6	1.3	0.3	1.15
HIV prevalence among Thai males (21-year-olds) (%)	2.9	3.3	0.9	0	

Source: Mae Hong Son Provincial Public Health Office

Data Rating

Data quality, reliability	Data continuity
***	****

Mae Hong Son MDG Target

Reduce HIV prevalence among reproductive adults to 1% by 2006

The HIV/AIDS situation

Mae Hong Son will likely achieve both the MDG and MDG Plus targets for this goal. In 1995, HIV prevalence among pregnant women was 3.70%; however, by 2003, it had reduced to 0.90%. It should be noted that from 2002 (when it reached a low of 0.3%) onwards, the rate has tended to increase. In 2004, the HIV prevalence among pregnant women was 1.15% – higher than that set as a goal by MOPH of 1%.

In 2003 and 2004¹² budget years, there was a coverage of 99.90 and 99.70% of pregnant women, respectively, who were administered blood-tests to identify HIV. However, this data did not cover the whole province, with data lacking from health centres. It was assumed under these conditions, that if all pregnant women were administered blood-tests, figures might be higher than those currently available.

In terms of HIV spread among the reproductive population, the HIV prevalence rate among 21-year-old Thai males was used instead of the condom use rate among secondary-school students due to lack of data availability for the later indicator. The prevalence of HIV among 21-year-old Thai males tended to decrease. In 1995 it was 2.50% and, even though it increased during 1996-1997, there were campaigns to promote the prevention of spreading HIV. To date it appears that the HIV spread among that age group was much lower than the goal set by the MOPH, which determined that the HIV prevalence among the reproductive population should not exceed 1.0%.

The HIV/AIDS challenges

Even though HIV data in Mae Hong Son indicated that among 21-year-old males, the rate tended to decrease, among pregnant women, it has increased during 2002-2004. When considering the general population, in 2004, it was 0.8% (31 May 2003)¹³. The rise in prevalence was attributed to unprotected sex (73.82%). Therefore, continued and closer surveillance on this issue is required. MHS Provincial Public Health Office is now working constantly on HIV/AIDS programnes such as raising awareness on prevention of HIV/AIDS, especially in the problem areas and reducing high-risk behaviour.

There should be continuous and regular support for the implementation by MHS Provincial Public Health Office in terms of budget allocation to implement the project and also building capacity of the personnel.



Access to public health services is primarily urban-focused

While the issues of HIV/ AIDS, malaria and other diseases have different root causes, they are seen as requiring similar strategic thrusts to combat effectively. As such, while each component will be separately discussed regarding situation and challenges, the resulting strategic themes and approaches will be jointly presented.

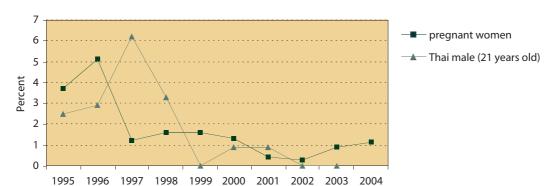


Figure 3.9 HIV prevalence rate among pregnant women and Thai men (21 years old)

Source: Mae Hong Son Provincial Public Health Office

The 2003 and 2004 Annual Reports, the Mae Hong Son Provincial Health Office

¹³ Mae Hong Son Provincial Public Health Office

MDG TARGET 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

MDG PLUS: Reduce malaria incidence in 30 border provinces to less than 1.4 per 1,000 by 2006

Mae Hong Son Scorecard

Already achieved the MDG target
Not likely to achieve the MDG Plus target

Indicators	1994	1996	1998	2000	2002	2004
Incidence rates associated with malaria 1/ (per 1,000)			27.52	30.01	3.19	8.40
Death rates associated with malaria ^{1/} (per 100,000)			4.71	3.86	0	0
Prevalence rates associated with tuberculosis 1/ (per 100,000)			24.41	53.63	107.47	67.34
Death rates associated with tuberculosis 1/ (per 100,000)			0.43	0.86	0	0
Prevalence rates associated with heart disease ^{2/} (per 100,000)	109.40	157.90	194.30	294.10	394.8	454.40 (2001)
Death rates associated with heart disease 2/ (per 100,000)		52.30	33.30	35.6	7.5	10.5 (2001)

Source: 1/ Communicable Disease Control Section, Mae Hong Son Provincial Public Health Office

Data Rating

Data quality, reliability	Data continuity
***	***

Mae Hong Son MDG Target

Reduce malaria incidence to less than 1.4 per 1,000 by 2006

^{2/} Bureau of Policy and Strategy, MOPH

The situation of malaria and other major diseases ¹⁴

While Mae Hong Son will likely achieve the MDG target, it has little potential to reach the MDG Plus target. Malaria is occurring in Mae Hong Son at a very high rate. The MOPH set a goal for malaria in bordering provinces not to exceed 1.4 per 1,000 population and the death rate should not be in excess of 0.3 per 100,000 population. Even though data indicates that from year 2000, the incidence rate in Mae Hong Son tended to decrease, it was still higher than the set national goal. In 2000 the incidence rate was 30.01 per 1,000 population and decreased to 8.40 per 1,000 population in 2004. The rate of deaths associated with malaria tended to also decrease.

Regarding the tuberculosis (TB) situation¹⁵, it was found that the trend is related to that of the HIV rate. In 1998-2000 when the HIV prevalence rate in the population increased, the prevalence rate associated with TB also increased. While in 2000-2001 when the HIV prevalence decreased, the prevalence rate associated with tuberculosis also decreased. This underlined the fact that HIV/AIDS is one of the main causes for the return of TB as a problem and a danger threatening the population. In order to cure tuberculosis, Thailand resorted to a new treatment method commonly called directly observed treatment short course (DOTS), in which medical personnel or others closely monitor to ensure that medicines were taken punctually and continuously. It was found that the cure rate associated with the DOTS applied to had a tuberculosis patients in Mae Hong Son 75.82% average success rate¹⁶.

The prevalence of heart disease tended to increase. In 1998, the ratio associated with heart disease was 194.3 per 1,000 population and went up every year.

Contagious diseases such as respiratory infections, haemorrhagic fever and elephantiasis, are frequently found. It is infectious respiratory diseases that have the highest incidence, such as influenza and pneumonia. The prevalence of respiratory disease is also related to the smoke and haze from the forest fires that occur in the early part of each year as part of the traditional farming practices. Also, the incidence rate associated with haemorrhagic fever in every group of the population in Mae Hong Son tended to gradually increase. As for elephantiasis, the infection rate in Mae Hong Son is fluctuating and much higher than the target set by the MOPH, which indicated that the elephantiasis infection rate should not exceed 0.02%. In Mae Hong Son, the infection rate in 2004 was 0.28% and the disease was widely found in the districts of Sob Moei and Mae Sarieng which border the Union of Myanmar. This data indicated that elephantiasis is a major contagious disease of Mae Hong Son that has to be closely monitored and followed up.

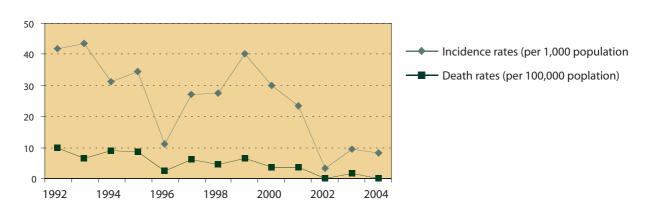


Figure 3.10 Incidence and death rates associated with malaria

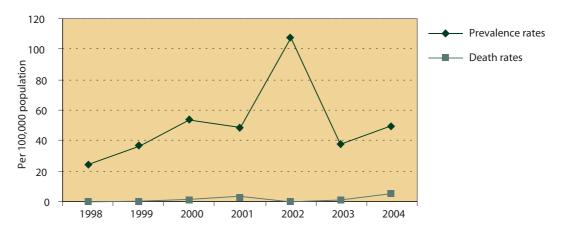
Sources: Communicable Disease Control Section, Mae Hong Son Provincial Public Health Office

Other indicators related to infectious diseases found in Mae Hong Son were added. These are prevalence rate associated with influenza and pneumonia, haemorrhagic fever, and elephantiasis.

⁵ Thailand could succeed in reducing the prevalence rate and the rate of deaths associated with tuberculosis, but HIV has turned tuberculosis into an critical danger once more. From the latest report on the situation of HIV/AIDS patients and infected persons in Thailand (30 June 2004), it was found that the infection rates of the top five opportunistic infectious diseases were mycobacterium tuberculosis, pulmonary or extrapulmonary: 70,251 cases (25.7%) followed by pneumonia caused by pneumocystis carinii: 52,028 cases (18.7%), crytococcosis: 40,090 cases (14.7%), candidialis of esophagus, windpipe (trachea, bronchi) or lungs: 12,585 cases (4.6%) and pneumonia recurrent (bacteria) more than one in a year: 8,924 cases (3.3%), respectively. (Source: http://www.aidsthai.org/)

Estimated from the proportion of tuberculosis cases cured under DOTS (1997-2003), Department of Communicable Disease Control, MOPH

Figure 3.11 Prevalence and death rates associated with tuberculosis



Source: Bureau of Policy and Strategy, MOPH

The challenges of malaria and major other diseases

The prevalence of malaria in Mae Hong Son is reducing; however, the death rate still remains higher than the national target (0.3 per 100,000 population). Furthermore, it was found that elephantiasis is also a problem attributed largely to migrants from neighbouring Myanmar where awareness and treatment is of a lower standard than Thailand. Therefore, while the overall trend of malaria and other major diseases appears to demonstrate a decreasing rate of incidence in Mae Hong Son, they are still much higher than national averages and goals. These health issues remain critical to the social and economic development of Mae Hong Son and require provision of knowledge and other information as well as direct medical intervention.

The strategic themes and approaches for dealing with HIV/ AIDS, malaria and other major diseases

The main thrust of Mae Hong Son's strategies in this area are to maintain the ongoing work and continue to raise general awareness as well as target specific areas for key interventions. The strategies to control HIV/AIDS, malaria and other major diseases in Mae Hong Son are:

Maintain general awareness raising programmes:

groups to have awareness and information about health care by focusing on prevention approaches and health check-ups.

Target specific areas for increased intervention:

- Increase control measures for communicable disease in the border areas and immigrant centres;
- Identify high-risk areas and periods in order to prepare appropriate measurements and monitoring.

Build capacities:

- Capacity-building for public health personnel, including at district and community levels;
- Increase roles and duties of stakeholders related to healthcare and health promotion.

GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY

MDG TARGET 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

MDG PLUS: Increase the share of renewable energy to 8% of the commercial primary energy by 2011; and Increase the share of municipal waste recycled to 30% by 2006

Mae Hong Son Scorecard

Highly likely to achieve the MDG target
Could not be assessed for the MDG Plus target 1 * and could not be assessed for the MDG Plus target 2 **

Indicators	1990	1994	1996	1998	2000	2002	2004
Proportion of land areas covered by forest 1/2 (%)	72.89 (1989)	71.72 (1993)	70.45 (1995)	69.14	89.66		
Ratio of area protected to maintain biological diversity to surface area ^{2/} (%)					82.31	52.58	
Proportion of population using solid fuel 3/(%)	80.53				64.85		
Proportion of municipal waste recycled in municipal area 4 (%)							40.55

Sources:

- 1/ Department of Natural Park, Wildlife and Plant Conservation
- 2/ Mae Hong Son Provincial Natural Resources and Environment Office and Department of National Park, Wildlife and Plant Conservation
- 3/ The 1990 and 2000 Population and Housing Census of Mae Hong Son, NSO
- 4/ Calculated from Region 1 Environment Office's data

Data Rating

Data quality, reliability	Data continuity
***	**

Mae Hong Son MDG Target

Increase the share of municipal waste recycled to 30 percent by 2006

^{*} Data is not available at provincial level

^{**} Data is insufficient for assessment

The environmental situation

Mae Hong Son will likely reach the MDG target, while it is not able to evaluate MDG Plus targets that have been set under this goal due to data not being available at the provincial level. For environmental management targets, it was found that some indicators were not suitable for Mae Hong Son province. For example, CO₂ emission and consumption of ozone depletion (CFCs) (which are very limited) have no province-based data being collected. However, there is a problem related to CO₂ emission caused by forest fires (part of traditional agriculture practices) whereby air quality, especially CO₂ and dust, should be verified and monitored. Regarding municipal waste in Mae Hong Son, it was found that most local governments still do not have proper solid waste management, so the proportion of local governments with sanitary solid waste management was added as an indicator.

The following discussion outlines the situation for some of the key environmental and natural resource sectors.



The quality of the environment is important for quality of life and economic development

Forestry

The proportion of the forest area in Mae Hong Son Province for the period 1988 to 1998 tended to continuously decrease, going from 72.95% to 69.14%. However, in 2000 the proportion increased up to 90.04% as a result of actions taken from late 1998 onwards. For example, there was the Chalerm Prakiat Reforestation Project by the National Park, Wild Animals and Plants Department and the campaigns launched for reforestation in accordance with the Enhancement and Conservation of National Environment Quality Policies and Plans 1997-2016.

In terms of community forests, Mae Hong Son Provincial Natural Resources and Environment Office provides support for community participation in forest management. A number of other activities and projects, including royal initiatives, have been implemented as part of ongoing efforts to pursue the sustainable development principle.

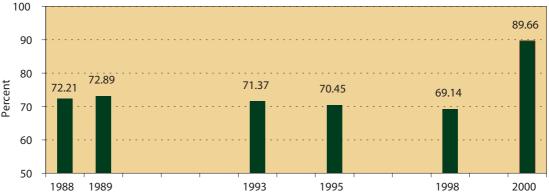
Energy

Due to data not being available at the provincial level, it is quite difficult to identify the existing situations and trends for energy use in Mae Hong Son Province.

In terms of the proportion of provincial renewable energy in the commercial primary energy, it was found that data are available only for household energy use which does not represent the amount of energy use in the province.



Figure 3.12 Proportion of land areas covered by forest



Source: Department of National Park, Wildlife and Plant Conservation



Smoke from forest fires represents a growing environment and health hazard

Air quality

Data related to indicators of air quality resulting from the carbon dioxide emission and consumption of CFCs had never been collected at the provincial level and there were also no reports on its impacts on environment. The majority of Mae Hong Son is covered with forestlands and agricultural areas and the population density is low. As a result, $\rm CO_2$ emission rates are expected to be rather low in lodgings where firewood and charcoal are used for household cooking. It was also found that the proportion of the population using solid fuel like firewood and charcoal tended to decrease from 80.53% in 1990 to 64.85% in 2000.

However, the issue that should be taken into account is the air quality in communities caused by the quantity of CO_2 and the dust volume in the air originating from forest fires (deliberately set by farmers as part of their traditional agricultural practices). It was found that the period between the end of February to mid-April (a measurement taken specifically in the districts of Muang and Mae Sarieng) was of high dust density and could adversely affect local people's health.

Water quality

Data on water quality during 1996-2001 found that the water quality was up to standard, but the majority of water sampling collecting sites did not cover the major and minor rivers and the data collection was not conducted on a regular or continuous basis.

Officials considered that there were no risk conditions in the urban area as the structure was not of a high density nor did it contain any industrial sites. There were no reports on the environmental impact on the water-source quality.

Solid waste

The data on quantity of solid waste collected by each local government does not serve as representative of the whole province as there were another nine TAO that did not collect solid waste in their constituencies due to administrative limitations and topographical conditions. The available data only detailed quantities and were not indicative of waste separation and management efforts.

From the survey of the 2004 data, on average, solid waste collected by the various municipalities in Mae Hong Son accounted for 25.706 tons per day and there were 10.424 tons of recyclable waste per day or 40.551% of the daily collected waste and garbage. This could be considered as very high if compared with the NESDB Plan that designated that the utilization of the collected waste and garbage should not be less than 30% of the generated waste and garbage; however, this was data for the municipal areas only.



Waste disposal: This landfill is designed and managed to standard

A major issue related to waste management was the quantity, which keeps increasing every year, and the limitations in waste disposal that tend to become increasingly critical, especially relating to disposal and waste management centres. In addition, waste management of most of the local governments was not sufficiently health conscious, resulting in environmental contamination and risks for the local population's health.

The environmental sustainability challenges

Environmental aspects of the MDGs that are highly likely to be achieved in Mae Hong Son are forest and conservation areas, air quality and water quality. However, in terms of energy use and solid waste, they cannot be evaluated due to lack of data.

The overall challenge will be finding the balance between sustaining the environment while pursuing economic growth. Significant economic growth is needed to address many key issues of poverty and social issues such as education and health care. These will require significant investments in economic infrastructure that typically have negative impacts upon environmental conservation and bio-diversity.

Strategic themes and approaches for pursuing environmental sustainability

As environmental management responsibilities are now being transferred local government authorities, the thrust of Mae Hong Son's environmental strategies focuses on increasing capacity of local government authorities to identify and implement their own local strategies. As most of the land in Mae Hong Son is designated as conservative areas, the Department of National Park, Wildlife Conservation and Plant (the main responsible organization), will need to cooperate with local government authorities, the Mae Hong Son Provincial Office, and local people for natural resource uses and management. Since environmental sustainability will be greatly impacted by the drive for economic growth, the strategy must be closely integrated with any economic development strategy and thus require building a 'bridge' between business, government, environmental groups and local communities.

The strategic themes and approaches for natural resource and environmental management include:

Forest management:

- Clearly identify and zone forest conservative areas;
- Introduce a proactive approach for forest conservation;
- · Promote community forest management.

Land management:

- Undertake surveys to identify rights on land use and allocate land rights in conservation and deteriorated forest area to the local people for traditional use;
- Improve soil quality by promoting organic agriculture (the use of organically fermented fertilizer, organic fertilizer, etc.).

Pollution control:

- Raise environmental awareness of local people including the necessity to have community wastewater treatment facilities;
- Increase public participation in water quality conservation and monitoring;
- Build cooperation efforts with regional institutions to research and introduce environmentally friendly alternate and renewable fuel sources in order to reduce the use of commercial energy and solid fuels (fuel wood, charcoal) that cause air pollution.

Solid waste:

- Build capacity of local government authorities to undertake proper solid waste management and sanitary land fills;
- Promote waste separation to increase waste's value such as organic waste (for organic fermented fertilizer) and produce the products from waste, and recycle.

MDG TARGET 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

MDG PLUS: -

Mae Hong Son Scorecard

Likely to achieve the MDG target							
Indicators	1990	2000					
Proportion of urban population with sustainable access to water source (% households)	88.30	83.50					
Proportion of rural population with sustainable access to water source (% households)	54.78	61.60					
Proportion of urban population with sustainable access to improved sanitation (% households)	96.90	97.90					
Proportion of rural population with sustainable access to improved sanitation (% households)	65.30	76.50					

Sources: The 1990 and 2000 Population and Housing Census of Mae Hong Son, NSO

Data Rating

Data quality, reliability	Data continuity
****	****

Mae Hong Son MDG Target

-

The water and sanitation situation

The proportion of the population with access to safe drinking water for the whole province increased from 57.34% in 1990 to 64.34% in 2000. The rural areas increased at a much higher rate than that of the urban areas that already had a high proportion. Mae Hong Son's major safe drinking water source was domestic piped water (22.8% in 2000). However, if the urban and the rural areas were viewed separately, it would be seen that the major safe drinking water sources for urban areas changed from domestic piped water to bottled water. The proportion of bottled drinking water increased from 5.2% in 1990 to 46.3% in 2000. Safe drinking water sources in rural areas continue to come mainly from piped water, both from home piped water (18.4% in 1990 to 23.1% in 2000) and non-home piped water (15.5% in 1990 to 18.5% in 2000). It would be assumed that from 1990 onwards, such proportions also tended to increase significantly.

The proportion of population with access to improved sanitation in Mae Hong Son also to increased. In 1990 the proportion was 67.07%

and increased to 78.39% in 2000. The proportion in rural areas increased more than that of urban areas, which already had a high proportion. In rural areas, the proportion increased from 65.30% in 1990 to 76.50% in 2000. Sanitary toilets with the highest proportion of use were those with septic tanks in both rural and urban areas (91.2% and 60.4% in 1990 and 85.4% and 72.0% in 2000, respectively). From 1990 onwards, that proportion also tended to increase.

Water and sanitation challenges

Mae Hong Son, even in its main urban centres, is still low-density with a sparse and scattered population, thereby reducing challenges in ensuring adequate water and sanitation conditions. At this stage, there do not appear to be major challenges facing Mae Hong Son regarding access to safe water sources and proper sanitation. However, there are some problems identified in the rural and remote areas that will need improvement and monitoring.

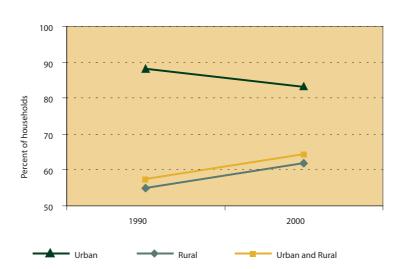
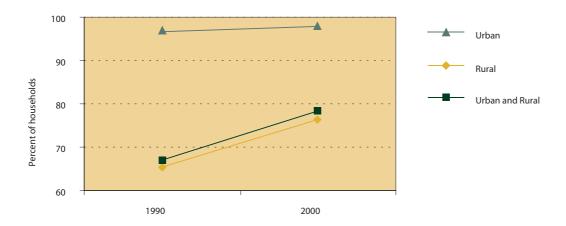


Figure 3.13 Proportion of population with access to safe drinking water

Figure 3.14 Proportion of population with access to improved sanitation



As economic development increases from tourism and other sources, local authorities in both the urban and rural areas must be prepared to meet the demand. Hence, the potential challenge is one of preparedness of local authorities.

Strategic themes and approaches for water and sanitation

The thrust of the strategic focus is to progressively build the overall management capacities of local authorities for provision of services in rural as well as urban areas. Such capacity building inputs also require close cooperation and technical support from provincial and other levels of government.

Capacity building of local government:

- Provide training and other inputs to local government officials on infrastructure planning and management for both rural and urban areas;
- Build a cooperative and supporting network among senior levels to provide technical inputs to local authorities.

Awareness raising and information programnes:

 Raise awareness of the local population on measures in maintain safe water supplies and sanitation requirements. MDG TARGET 11: By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers (globally)

MDG PLUS:

Mae Hong Son Scorecard

This MDG target is not applicable to Mae Hong Son									
Indicators	1990	1994	1996	1998	2000	2002	2004		
Proportion of households with secure tenure (urban and rural) (%)	95.31				90.20				
Proportion of households with secure tenure (urban) (%)	86.21				80.35				
Proportion of households with secure tenure (rural) (%)	96.60				91.65				

Sources: The 1990 and 2000 Population and Housing Census of Mae Hong Son, NSO

Data Rating

places (%)

Data quality, reliability	Data continuity
****	****

46.57

(1995)

57.76

62.71

58.51

67.14

44.45

Mae Hong Son MDG Target

Proportion of households with

healthy lodgings and dwelling

Significant improvement in quality of living places

The secure tenure situation

While Mae Hong Son tends not to have any major slum communities, the province still looks to address issues such as tenure and other aspects that can directly affect the quality of life of low-income residents. The proportion of households with secure tenure in Mae Hong Son to be decreased and this was reflective of the general situation in Thailand. In 1990, the national percentage was 86.3% and in 2000 it was 81.50%, while in Mae Hong Son it was 95.31% in 1990 and decreased to 90.20% by 2002. One of the major causes for the decrease in the proportion of households with secure tenure was due to the fact that 90.04% of Mae Hong Son was forestlands and 52.58% were protected forests (2000 data) where no ownership papers could be issued for people who reside in these areas.

However, if the urban and the rural areas were considered separately, it can be seen that the proportion of households with secure tenure in urban areas is lower than in rural areas. The proportion in urban areas in 1990 was 86.21%, and decreased to 80.35% in 2000, while in rural area was reduced from 96.60% to 91.65% during the same period. From this data, it can be seen that the problem of secure tenure in urban areas may cause a problem in the future if countermeasures are not taken.

Apart from the data related to the proportion of households with secure housing, the proportion of households with sanitary lodgings and dwelling places were another indicator of the quality of life of the population. To date, this has tended to increase in Mae Hong Son, but, based on the 2004 data, the proportion would be 67.14%, which is much lower than that set by the Department of Community Development, at 95%, and also lower than that of the national average at 93.54%.

Secure tenure challenges

At present, Mae Hong Son is not faced with issues related to slum communities. However, during the past 10 years, the proportion of population without secure tenure has increased in both the urban and rural areas, especially in the highland area. While Mae Hong Son is coping better than the national situation, intervention will be needed, especially for the rural and upland areas as development pressure related to exploitation of natural resources in these areas increases. Without security of tenure, many groups and communities will be faced with eviction and removal in the face of the economic development forces.

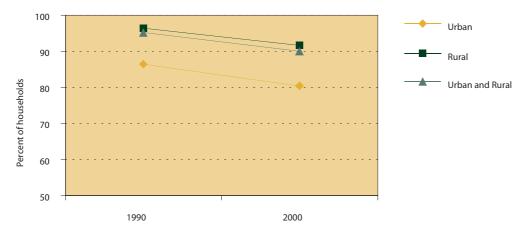


Figure 3.15 Proportion of households with secure tenure

Source: NSO

Looking to the future, as economic opportunities increase, particularly in the urban areas, there will likely be an increasing trend towards rural-urban migration of both the registered and non-registered population. As such, strategies will soon be needed that not only address housing issues for registered populations, but also for the non-registered population that come seeking improved economic opportunities and social benefits. As in most Thai cities, few landuse plans are in effect, and where they do exist, they are seldom enforced, resulting in inefficient provision of infrastructure that seldom addresses the needs of the poorest segment of society.



"Living conditions in highland areas still follow traditional approaches"

Strategic themes and approaches for security of tenure

The main thrust of the strategic interventions will be in two areas: (1) Resolving the inherent conflict between the legal framework restricting ownership within the conserved forest areas, and the reality that many groups and communities have been residing in these areas for decades and longer; and (2) Preparing urban management coping strategies for the foreseen increase in urban population in order to maintain and provide an appropriate quality of life for all residents.

Rural and forest conservation areas;

- Clearly identify the forest conservation areas and living areas and provide rights to the people;
- Pursue a programme of local and other stakeholder participation in such processes to reduce conflict between the government and local people.

Urban areas:

 Build capacity of local urban authorities to undertake effective urban management that will address the needs of and contribute to the quality of life of all segments of the population.

The Way Forward

Strategic priorities for Mae Hong Son

As identified in the previous chapter, the strategic issues for Mae Hong Son are poverty, health and education. The priorities are now more clearly defined, and strategic themes and approaches have been formulated to help in the next step of identifying specific actions. From the work to date, the inter-relationships between economic development and environmental sustainability are more apparent. And, largely as a result of the MDG process, many stakeholders are increasingly aware of the need to better integrate and balance the components of social development, environmental conservation and organizational aspects within the overall development process.

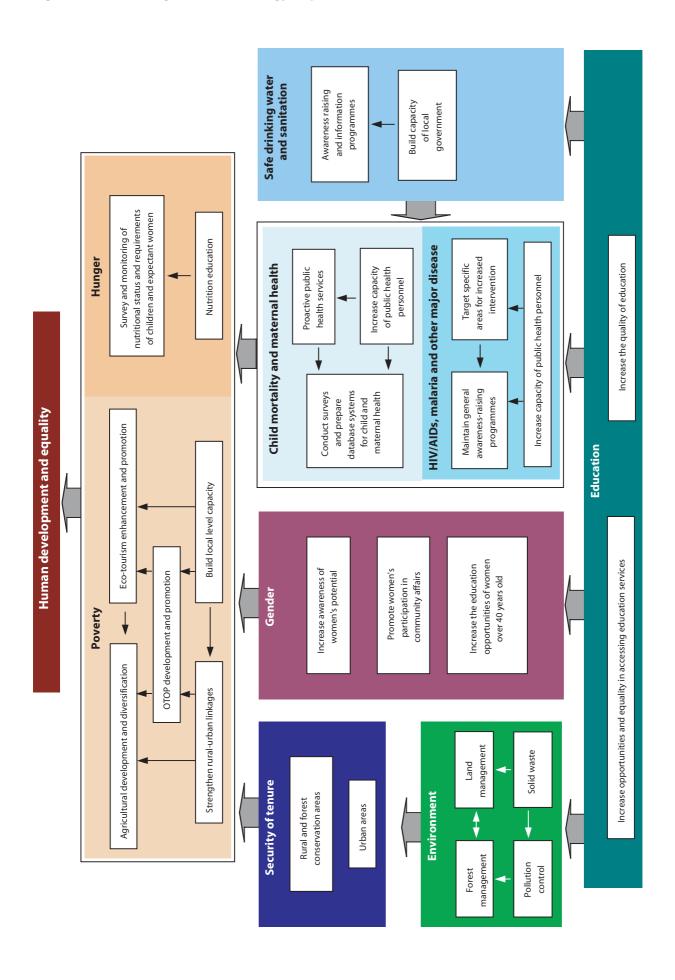
However, more effort is still needed to effectively move beyond the dominant sectoral view of health and education. They should be considered with all development aspects and truly integrated with strategic issues or themes. The following 'map' of the strategic themes illustrates the output of the formulation process in summary form whereby each MDG target is brought together to show the linkages and relationships between them. It also identifies how the targets can support each other to achieve the global agenda of promoting 'Human Development and reducing Global Inequalities'. Within the figure, education is considered the base to support and create opportunities for all to access to (1) ensure the use of natural resources and environmental management in a sustainable manner, (2) reduce gender inequalities and increase the importance of women in the community, (3) improve public health services that are supported by (4) providing safe drinking water and basic sanitation, and (5) secure tenure in both urban and rural areas that will result from improved land management and other practices.

At a higher level, this framework will bring job and income opportunities for local people, thereby reducing poverty and hunger within the province, ultimately leading to support the global MDG objectives of promoting human development and reducing global inequalities. The way forward in tackling these issues will require a focus on three measures for provincial development: (1) provincial database systems and management, (2) integration into provincial development planning, and (3) capacity building.

Database systems and management

There are several components to this measure beyond gathering 'data'. While more and accurate information is required, especially for some specifically targeted areas and groups, there is an overall need for greater integration of the systems at the regional, national and local levels. Currently, data systems are primarily geared to meeting national needs and are not yet adapted to serving the existing local development activities and the ongoing decentralization process. In this regard, the MDG process has highlighted the need for a wider sharing and networking of information sources, resources and systems to begin addressing specific local issues and priorities. With the strengthening of such systems, the decision-making process can also be strengthened and linked more effectively to a monitoring and evaluation process.

Figure 4.1 Mae Hong Son MDGs Strategy Map



Integration into provincial development planning

There are several ongoing development planning activities that are taking place in the province and at other levels that directly impact the province. At the provincial level, the MDG output needs to be integrated within the Provincial Strategic Plan and supported by the threeyear annual rolling plan of operation, associated budget and integrated monitoring and evaluation scheme. Additionally, extra measures are needed to ensure closer integration with the planning processes that take place in all line ministries, the CEO Governor's Office, as well as at the local levels in the municipalities and Tambons. These measures require both horizontal and vertical linkages that not only help the individual provincial organization pursue a more strategic and coordinated course of action, but also help coordinate the wider application of priorities and strategies at all levels. This goes beyond sectoral thinking and practices.

When looking at integration within the provincial Strategic Plan, the MDG implementation process is consistent with the formulation process of development strategies at the provincial level. The distinction is in the data collection and analysis framework that is guided by compliance with the overall MDG framework and elaborated by taking into consideration the global and the national goals. Whereas, in terms of the existing provincial development strategies formulation process, the overall provincial situation will be first considered on a wider range of development issues.

In concept, the two processes are mutually supportive in data collection, establishing the database system, situation analysis, and determining the development goals, targets and strategies. The two processes stress participation by all sectors in jointly determining the resultant strategies based on reliable data, operational indicators and monitoring systems. However, the main strength of introducing the MDG approach and integrating it with the existing provincial development planning system is that it reinforces the need to take a wider perspective beyond only economic growth considerations. When combined with an associated capacity-building programne and expanded database system, the integration of the MDG outputs within the provincial development planning and implementation process supports the

introduction of a more sustainable and balanced approach to locally-based development that promotes achieving specific targets based on realistic indicators.

Capacity building

By themselves, formal processes for integration within development plans are not sufficient. To be truly effective requires changes not only in procedures, but also in attitude and capability. To help address this need, a supporting capacity-building programne was also introduced targeting the implementation level within the provincial administration. To facilitate the overall integration and capacity-building process "Strategy Management" was adopted as an administration model. Through such an approach, direction and goals were combined with strategies to drive the institutional operations towards a vision that could be concretely monitored and evaluated. Sub-themes included developing the administration's capacity, translating updated strategies into action, developing a database system and developing a participatory approach that also extended to monitoring and evaluation activities.

The specific capacity-building inputs were structured into three components:

- Teamwork and database system development – these activities focused on reviewing provincial goals and strategies, and roles and functions; learning database systems including the use and application of indicators and monitoring systems; undertaking data collection and analysis; and building teamwork horizontally and vertically.
- Determining strategies, translating strategies and monitoring systems the training inputs targeted approaches to undertaking a situation analysis; ways and means to integrate provincial tasks, strategies and MDGs; application of strategy management tools; and methods for raising awareness on various partner's roles;
- Promoting local participation as a means to build linkages to the local level, the emphasis is on building collaboration through stakeholder analysis; building compatibility between provincial and local strategies and plans; developing local leadership for change; establishing support systems for participatory monitoring; and information spreading and public relations.

As part of the output from the capacity building activity and as a means to support the subsequent management processes, the provincial team formulated the 'Strategy Map' (Figure 4.1). A more complete overview of the capacity building events and framework is contained in Annex II.

Alignment with regional and national strategies

A number of national and regional plans and strategies exist that help guide locally-based planning and implementation activities and directly support the development objectives as promoted under the global MDGs. Thailand's development vision for the next 20 years focuses on the alleviation of poverty and the upgrading of the quality of life for the Thai people, so that "sustainable development and well-being for all can be achieved". The Sufficiency Economy philosophy is to be followed as a shared value of Thai people, guiding the transformation to a new national management system based on efficiency, quality of life, and sustainability objectives.

The Ninth National Economic and Social Development Plan, currently in its final year of implementation, built upon the Eighth Plan² that advocated a holistic people-centred development approach. Within the Ninth Plan, major emphasis was placed on balanced development of human, social, economic, and environmental resources. A priority goal was pursuance of good governance at all levels of Thai society in order to achieve real sustainable people-centred development.

The country is currently in process of formulating its 10th National Economic and Social Development Plan. While not finalized, the plan is expected to have the following areas of focus relevant to the MDG process:

- Create balance of development: poverty reduction and income distribution;
- Proactive social development: promote good health for all, social security and safety, and prepare for an aging society;

- Good governance: increase capacity of civic society, promote good governance in stakeholders, promote and restructure mechanisms to support good governance in all stakeholders;
- Build a knowledge-based society: capacity building and educational system reform;
- Economic restructuring to increase the country's competitiveness: infrastructure and logistic development, increase productivity in production, trade and service sectors, increase efficiency of organizations, networks and mechanisms to increase competition.

In addition to the above guiding objectives and principles, support of the MDG objectives are also contained in a number of other laws and plans, for example: the Ministry of Public Health's 9th Public Health Development Plan, and the Ministry of Education's 5-year plan.

Regional scale integration of development priorities was supported by a Cabinet resolution requiring all provinces to adopt the concept of "Integrated Provincial Administration (IPA)"3. As such, each province is required to establish their own management strategies and targets corelating to those of the country and integrate them within a cluster of provinces so as to work together and share resources to set common development strategies and subsequent coordinated actions. Mae Hong Son is a member of the Upper North Region Cluster along with eight other provinces (Chiang Mai, Chiang Rai, Phayao, Lampang, Nan, Lamphun, and Phrae). The development strategies of the Upper North region and that of Mae Hong Son province in 2005 will maintain the same main concepts of those established in 2004. However, for better efficiency in reaching the proposed targets, Mae Hong Son is now in the process of reconsidering and adjusting some development methods in light of the work carried out in the MDG formulation process and will integrate them into their Provincial **Development Plan**

While not part of the MDG framework, this tool proved very useful as a means to help illustrate whether the various perspectives elaborated under the MDG framework were coherent and supportive of the organization's existing strategies.

² Presentation made in the Annual Meeting of the National Economic and Social and Development Board, June 2005.

Mae Hong Son Province appointed its IPAC on 19 November 2003; the governor is the chairman and the chief of the provincial office is the secretary. There are 56 members in total, from 44 chiefs of central and regional agencies located in the province, 6 local mayors (from Mae Hong Son Provincial Administrative Organization and municipalities), 3 private enterprise representatives, and 3 NGOs and civil society representatives.

The RTG is responsible for setting target and key performance indicators at the national level. However, at the provincial level, the IPAC can independently set its own indicators in more detail. Mae Hong Son province has been applying this concept since 2004. The provincial integrated development indicators attempt to give importance to economic. social. environmental administrative factors. There are already many indicators directly relating to the MDGs at the national level. Annual monitoring and evaluating of the results is to be carried out via the network of the Ministry of Interior (MOI) monitoring system and the Office of the Public Sector Development Commission (OPDC). Through this network, information and results concerning provincial development can be accessed on a continual basis.

Needed resources

While much of the results from the Provincial MDGs Report can be integrated within the Provincial Development Plan and expressed in the form of projects, there is also a need for additional resources and inputs to transform it into reality, as the existing financial, human, technical and other resources within Mae Hong Son are extremely limited. Additional inputs and support, especially for the major transportation and communication networks that will facilitate the economic, health and educational development aspects, are now needed to help translate these strategic themes and approaches into action with significant impact.

While financial resources will always be a potential blockage, more important resources are needed in the areas of commitment. cooperation and coordination from national ministries and line agencies to respect and integrate sub-national development objectives and priorities within their national programmes. Under the ongoing decentralization process, it is expected that the provincial and other levels will gain increased responsibility, authority and financial resources for implementing their own integrated development plans. As the formulation and implementation of such an integrated plan becomes more complex, there will be a need for continual capacity-building inputs at both the management and staff levels in order to effectively cope and manage the growth and

development. This transition from local 'administrators' to local 'managers' needs new approaches, innovations and tools beyond traditional planning methods. To truly make decentralized integrated planning effective requires introduction of more strategic approaches in both planning and management. In Mae Hong Son, external resources and supports are largely needed, particularly in the areas of capacity building of governmental as well as civil societal sectors. Monitoring and evaluation of implementation of provincial strategic development plans, post-MDGR should be assisted and continued by concerned external and national agencies.

The way forward

While the above discussion outlines resources needed from the national level, there are further actions that the provincial level must also undertake by itself to not only make the MDGs a part of its future development, but also to pursue overall sustainable development on a balanced and integrated basis that addresses all development concerns. The challenges before us are 'how Mae Hong Son can attain the global MDG benchmarks, and national MDGs Plus and, at the same time, sustain the local identities of Mae Hong Son, namely, the richness of nature and the diversity of cultures, which are considered to be the MDGs* of Mae Hong Son' and 'how can we integrate the MDGs into local agendas that balance between achieving realistic local targets and still maintain the global objectives?' Two key components to respond to these integrated and concrete challenges are to:

- 1. Continue the localization process at the integrated provincial administration level (upward integration); as well as,
- 2. More closely involve the municipal and Tambon authorities (downward integration) to establish more effective locally- and community-based linkages.

While the integration at the provincial cluster level is seen as potentially increasing the 'efficient' use of resources, the local government levels are seen as being important to achieving greater 'effectiveness' by helping build increased partnerships and ownership not only by government level, but increasingly by civil society who have the biggest stake in

achieving success. Operationalizing MDGs at this very local level requires a closer integration of the MDG objectives within the ongoing strategic development planning approach that is taking place in municipalities and sub-districts. As such there will be a need for the provincial level to help 'translate' the MDGs into the local context as part on an overall more balanced approach to sustainable development that moves away from a strictly sectoral perspective of the problems and solutions.

Building the partnerships and ownership is part of the 'local' answer. For its own part, Mae Hong Son is seriously pursuing the implementation measures within the responsibility of government by applying new ways of looking at, and undertaking, the necessary planning and action by emphasizing the formulation and implementation of key strategies in an integrated and balanced approach for sustainable development, as stated in the Rio Declaration "Think Globally, Act Locally".

Mae Hong Son Provincial Working Group

The Mae Hong Son Provincial Working Group was appointed on 14 December 2004 with a total of 20 members. It is chaired by the governor and includes 15 heads of provincial authorities, 1 representative from private business organizations and 4 representatives from local NGOs and civil society organizations:

1)	Governor of Mae Hong Son	Chairperson
2)	Vice Governor of Mae Hong Son (Mr. Chana Narksuriya)	Vice chairperson
3)	Permanent Secretary of Mae Hong Son Province	Member
4)	Chief of Mae Hong Son Provincial Community Development Office	Member
5)	Chief of Mae Hong Son Provincial Education Office, Region 1	Member
6)	Chief of Mae Hong Son Provincial Statistical Office	Member
7)	Chief of Mae Hong Son Provincial Agricultural and Cooperative Office	Member
8)	Chief of Mae Hong Son Provincial Agricultural Office	Member
9)	Director of Mae Hong Son Local Community College	Member
10)	Chief of Mae Hong Son Provincial Natural Resources and Environment Office	Member
11)	Chief of Mae Hong Son Provincial Social Development and Human Security Office	Member
12)	Chief of Mae Hong Son Provincial Financial Office	Member
13)	Chief of Mae Hong Son Provincial Public Health Office	Member
14)	Chairman of Mae Hong Son Chamber of Commerce	Member
15)	Coordinator of Thailand Research Fund, Mae Hong Son Office	Member
16)	President of Coordinated Non-governmental Organization Center,	Member
	Mae Hong Son Provincial Office	
17)	Coordinator of Mae Hong Son Provincial Community	Member
18)	Chief of Mae Hong Son Governor's Office, The Mae Hong Son Provincial Office	Member and Secretariat
19)	Head of Mae Hong Son Provincial Information Management System	Member
	and Communication, Mae Hong Son Provincial Office	and Assistant Secretariat
20)	Head of Mae Hong Son Provincial Strategy Development Section,	Member
	Mae Hong Son Provincial Office	and Assistant Secretariat

Mae Hong Son Provincial Working Group's responsibilities cover 1) Coordination of the data collection and identification of provincial indicators and goals, 2) Consideration, implementation and recommendations for the possible solutions of the existing problems and obstacles so that the project can attain its objectives, and 3) Other tasks as recommended by the Chairman.

Capacity Building Overview and Framework

Mae Hong Son's personnel capacity building plan has the following as goals: 1) that Mae Hong Son personnel capacity is developed and can adequately support Mae Hong Son provincial development strategies, and 2) that the MDGs-project related activities can effectively coordinate the outcomes of the operations into provincial development strategies and monitoring.

Capacity Building Process and Plan

Main Themes: Strategy Management – the administration model is of direction and goal, with good strategies

to drive the institutional operations towards its goal which could be concretely monitored

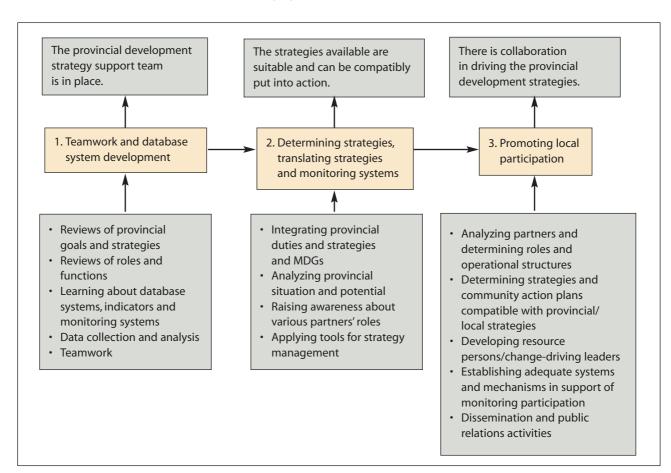
and evaluated.

Sub themes: Comprised of developing the capacity of core team, review and revamping the strategies, translating

strategies into action, developing a database system and participatory monitoring and evaluation

and developing a participatory process.

Process: As outlined in the following figure:



The capacity building activities under this project have involved the staff level in the core team who will become the driving force for the provincial strategies. The extensive operations will cover the target groups who form the provincial MDGs working group and other related provincial officers and the building of understanding among Mae Hong Son's people through the mass media.

The implementation of project activities, especially sub-group and working group meeting were considered as a part of capacity building activities as the participants learned from their direct experiences through a "Learning by Doing" process. Moreover, the training and seminar held during the project period also provided more specific knowledge to the core team and working group. These trainings and seminars were "**Training** on: Facilitator for Strategy Management, Monitoring and Evaluation", the target groups were the core team and working group; "**Seminar** on "Local Forum: Cooperation and Integration of Provincial and Local Strategies and Its Implementation", the target group were local government officers; and "**Seminar** on: Concluding Lesson Learnt", to draw lessons and experience acquired from the operations and from the brainstorming opinions towards the guidelines for improving and increasing work performances officers from relevant organizations.

Data Tables on MDGs and MDGs Plus, Mae Hong Son, 1990-2002

Poverty and hunger															
MDG and MDG+ indicators	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Proportion of population below the poverty line (%) 1			30.63		48.17		43.06		44.5		27.96		23.18		
Poverty gap ratio 1					17.91		14.36		17.62		8.61		5.70		
Share of poorest quintile in individual household income (%) ²					6.8						8.7		9.8		
Poverty severity ¹					8.58		5.68		8.56		4.00		1.95		
Prevalence of underweight children (under 5 years old) ³ (%)						23.62	20.18	16.69	17.42	16.01	13.59	16.25	17.28	25.43	16.26
Prevalence of micro-nutrient deficiency 4 (%) - iodine - iron	44.12	41.62 7.37	39.89 12.77	35.62 7.65	36.34 11.73	28.48 11.95	20.94 13.11	10.48 17.6	8.10	6.63 5.58	5.82 14.19	4.74 5.30°	4.07 5.30 ^a	3.71° 4.50°	
Rate of development of children under 5 years old ³ (%)												71.67	95.44	97.98	87.82

Note:

^a Additional data from Mae Hong Son Provincial Public Health Office

Sources: 1 NESDB (http://poverty.nesdb.go.th/poverty new/default.htm)

- ² Report of the 1994-2002 Household Socio-Economic Survey, NSO
- ³ 2004 Annual Report, Mae Hong Son Provincial Public Health Office
- ⁴ Division of Nutrition, Department of Health

Education

MDG and MDG+ indicators	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Net enrolment ratio in primary education (%)					95.40	93.35	87.34	95.00	92.55	92.49	95.25	94.20	93.24	0.00	87.40
Gross enrolment ratio in primary education ¹ (%)					121.33	122.99	118.61	120.99	120.08	120.30	118.93	116.82	116.37	112.65	114.92
Retention rate of primary education ² (%)			69.47	78.86	75.83	68.96	67.33	73.72	74.98	72.66	74.69	74.08	73.20	74.48	75.57
Literacy rate of 15-24 year-olds ³ (%	71.21										74.88				
Net enrolment ratio in lower secondary education ¹ (%)								45.39	40.21	42.52	45.72	47.27	45.74		
Gross enrolment ratio in lower secondary education¹ (%)					47.37	53.73	54.79	60.55	59.19	65.15	67.50	70.55	67.20	68.52	74.30
Net enrolment ratio in upper secondary education ¹ (%)								24.14	25.21	24.21	24.43	27.16	24.13		
Gross enrolment ratio in upper secondary education ¹ (%)					19.28	22.33	25.71	28.26	30.69	31.69	33.86	37.44	37.95	40.13	41.74
Retention rate in lower secondary education ² (%)	90.83	86.04	90.57	87.78	89.86	89.50	90.72	86.00	82.73	81.13	84.66	82.76	76.17	84.20	88.04
Retention rate in upper secondary education ² (%)	85.13	86.94	88.27	84.79	86.51	85.69	86.32	86.42	84.41	82.76	81.25	90.01	79.50	84.62	88.34
Average test scores of primary students ⁴ (%) - Thai			68.20		55.50		56.86		57.38			18.22	42.30	36.55	
- English							53.83		52.65			16.17	39.34	30.99	
- Mathematics - Science			52.37 57.87		47.42 44.34		45.95 51.21		45.28 48.30			15.22	41.18	32.71 34.39	
Average test scores of lower secondary students ⁴ (%) - Thai - English			56.70	57.01		53.48 31.43		56.94 36.83				42.50 32.88	42.81 37.54	49.47 33.07	
- Mathematics - Science			45.43 51.60	41.89 49.38		30.89 42.03		29.87 43.77				28.05	33.72	30.97 34.66	
Average test score of upper seconday students*(%) - Thai - English			66.89	55.33		47.32 27.48		43.46 28.44	55.27 42.54	52.19 40.17	52.19 39.24	54.68 39.86	56.00 42.54	40.88 31.87	
- Mathematics - Science			59.48	48.28		28.02 46.25		25.25 30.61	52.09	42.58	46.65	48.68	52.01	31.02 44.38	
The proportion of youth aged 11-24 years who have computer skills ⁵ (%)													16.28		
Teacher-student ratio - primary - lower secondary					1:18 1:17	1:18 1:18	1:20 1:20	1:21 1:22	1:21 1:18	1:21 1:19	1:20 1:20	1:20 1:22	1:23 1:20		1:24 1:25
- upper secondary (general) - upper secondary (vocational)					1:17 1:11	1:18 1:12	1:20 1:16	1:22 1:14	1:18 1:20	1:19 1:17	1:20 1:18	1:22 1:31	1:20 1:26	1:28	1:25 1:28

Sources: ¹ Calculated from data from Office of Basic Education Council, MOE and DOPA ² Calculated from data from Office of Basic Education Council, MOE ³ The 1993 and 2003 Population and Housing Census of Mae Hong Son

⁴ Bureau of Education Testing, Office of the Basic Education Commission, MOE ⁵ Statistical Tables of Children and Youth Survey in 2003, NSO

Gender equality and women empowerment

MDG and MDG+ indicators	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Ratio of girls to boys in primary, secondary and tertiary education ¹ - primary - seconday - tertiary	0.89	0.88 0.91	0.90 0.87	0.90 0.87	0.90 0.91	0.90 0.92	0.92 0.97	0.93 0.98 1.46	0.93 1.01 1.86	0.93 1.05 1.36	0.90 1.06 1.70	0.92 1.09 1.70	0.92 1.07 1.54	0.92 1.08	0.92 1.10
Ratio of literate women to men 15-24 years old ²	0.92										0.90				
Share of women in waged employment in non-agricultural sector ^{b,3} (%)					43.24	38.35	40.61	39.63	39.85	34.30	41.02	39.23	46.31	46.09	41.88
Proportion of seats held by women in local council ^{c,4} (%)															9.04
Ratio of literate women to men over 40 years old ²	0.82										0.80				
Proportion of women in positions in the local governments ^{c,4} (%)															3.97
Ratio of tertiary graduated women to men ^{b, 3}					1.19	0.95	1.06	0.71	0.85	0.67	1.10	1.06	1.29	1.27	1.12

Remark: * Tertiary education started in 1997 and there is only certificate-level or associate-level education provided.

b Those of 1996 and 1998-2000 were based on the population of those 13 years old and over.

- Those of 2001-2004 were based on the population of those 15 years old and over. $^{\circ}\,$ Local government authorities in Mae Hong Son include PAO, municipalities, and TAO.

- Sources: ¹ Calculated from data from the Office of Basic Education Council, MOE
 ² Calculated from data from the 1993 and 2003 Population and Housing Census, NSO
 - ³ The Report of Labor Force Survey of Mae Hong Son (third trimester), NSO
 - Questionnaire survey from local government authorities in Mae Hong Son

Child and maternal health

MDG and MDG+ indicators	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Under-five mortality rate per 1,000 live births ¹							19.52	19.62	12.74	21.66	19.24	13.49	15.21	15.30	12.15
Infant mortality rate per 1,000 live births ¹						6.67	6.07	9.63	3.96	8.92	10.82	7.36	8.30	7.65	7.54
Incidence rate of children under 5 years old associated with measles ³								518.53	64.37	48.27	44.22	72.29	557.64	35.30	
Maternal mortality ratio per 100,000 live births ¹							26.38	28.33	76.10	31.85	30.06	49.07	55.33	33.20	82.44
Proportion of births attended by skilled health personnel ² (%)												34.35	57.24	59.12	58.00

Sources: ¹ Bureau of Policy and Strategy, MOPH
² 2003 Annual Report, Mae Hong Son Provincial Public Health Office
³ Communicable Disease Control Section, Mae Hong Son Provincial Public Health Office

HIV/AIDS, malaria, tuberculosis and health disease

MDG and MDG+ indicators	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
HIV prevalence among pregnant women¹ (%)						3.7	5.1	1.2	1.6	1.6	1.3	0.4	0.3	0.9	1.15
HIV prevalence among Thai males (21 years old) ¹ (%)						2.5	2.9	6.2	3.3		0.9	0.9			
Incidence rates associated with malaria ² (per 1,000)			41.80	43.45	30.96	34.52	11.25	26.90	27.52	40.22	30.01	23.43	3.19	9.39	8.40
Death rates associated with malaria² (per 1,000)			9.92	6.72	8.98	8.43	2.27	6.13	4.71	6.48	3.86	3.85		1.67	
Prevalence rates associated with tuberculosis² (per 100,000)									24.41	36.27	53.63	47.96	107.47	38.02	49.19
Death rates associated with tuberculosis² (per 100,000)									0.43	0.43	0.86	3.00	0.00	0.84	5.00
Proportion of tuberculosis cases cured under DOTS ³ (%)								75.00	76.02	77.16	76.23	76.68	73.99	75.65	
Prevalence rates associated with heart disease ⁴ (per 100,000)		86.2	92.1	102.9	94.2	109.4	129.7	157.9	173.6	194.3	252.6	294.1	320.2	394.8	454.4
Death rates associated with heart disease ⁴ (per 100,000)							52.3	32.0	33.3	28.8	35.6	15.3	7.5	10.5	
Incidence rates associated with influenza ² (per 100,000)								47.98	62.25	102.80	86.24	116.88	88.33	56.25	30.79
Incidence rates associated with pneumonia ² (per 100,000)								1,059.8	710.5	798.8	1,013.1	744.8	697.5	645.2	605.6
Incidence rates associated with haemorragic fever ² (per 100,000)						48.45	23.63	20.90	168.80	43.75	0.00	20.94	45.00	43.13	58.75
Side positive rate with Elephantiasis ² (%)				1.68	0.37	0.41	0.08	0.16	0.51	0.14	8.23	0.47	0.77	0.45	0.28

Sources: 1 2003 Annual Report, Mae Hong Son Provincial Public Health Office
2 Communicable Disease Control Section, Mae Hong Son Provincial Public Health Office
3 Department of Communicable Disease Control, MOPH
4 Bureau of Public and Strategy, MOPH

Environment

MDG and MDG+ indicators	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Proportion of land areas covered by forest¹ (%)	72.89 (1989)	72.21		71.37		70.45			69.14		89.66				
Ratio of area protected to maintain biological diversity to surface area² (%)									82.31		52.58				
Proportion of community forestry area ³ (%)										0.05	0.07	0.10	0.35	0.45	0.45
Proportion of population using solid fuel ⁴ (%)	80.53										64.85				
Proportion of municipal waste recycled in municipal area ^s (%)															40.55
Proportion of urban and rural population with sustainable access to water source ⁴ (% households) - urban - rural - total	88.30 54.78 57.34										83.50 61.60 64.34				
Proportion of urban and rural population with sustainable access to improved sanitation ⁴ (% households) - urban - rural - total	96.90 65.30 67.07										97.90 76.50 78.39				
Proportion of urban and rural population with sustainable access to improved sanitation* (% households) - urban - rural - total	86.21 96.60 95.31										80.35 91.65 90.20				
Proportion of households with healthy lodgings and dwelling places ⁷ (%)			30.75	39.65	4 4.45	46.57		54.63	57.76	63.29	62.71	67.16	58.51	62.87	67.14

Remark: In 1990, urban area meant municipal and sanitary districts; rural area means non-municipal and non-sanitary district areas (including some parts of sanitary districts identified as rural areas). In 2000, urban area referred to municipal areas and rural area referred to non-municipal areas.

Sources: Thailand's 2001 Forestry Statistics, Department of Natural Park, Wildlife and Plant Conservation (http://www.dnp.go.th/webcontent/index.asp?group_id=8)

² Calculated from data from the Royal Thai Survey Department, Mae Hong Son Provincial Natural Resources and Environment Office,

and Department of Natural Park, Wildlife and Plant Conservation

- ³ Calculated from data from the Royal Thai Survey Department, and Community Forest and Economic Timber Unit, Mae Hong Son Provincial Natural Resources and Environment Office
- ⁴ The 1990 and 2000 Population and Housing Census of Mae Hong Son, NSO
- ⁵ Calculated from data from the Environment Office, Region 1 (Chiang Mai)
- ⁶ BNS, Department of Community Development, MOI

MDG Data Rating Scale

Data quality, reliability

*	Data are not available.
**	Data are available, but are not reliable.
***	Data are largely available and reliable. But there may be some data gaps; some population groups may
	be systematically excluded. Or there may be inconsistency, confusion regarding definition, data
	collection and verification method.
****	Most data are available and reliable at national level, but not at sub-national level.
****	Data are available, reliable and comprehensive. Data collection and verification are clear and consistent.

Data continuity

*	Trend data are not available.
**	Trend data are available, with long intervals.
***	Trend data are available, but are based on different sources/methodologies that make it difficult to
****	do trend analysis. Trend data are largely available, with reasonable intervals. But data gathering may be difficult and
***	cumbersome, especially at sub-national level.
****	Trend data are readily available at national and sub-national levels.



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