

Migration and HIV/AIDS in Thailand:

Triangulation of biological, behavioural and programmatic response data in selected provinces



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ACRONYMS

AIDS	Acquired immunodeficiency syndrome
ART	Antiretroviral therapy
ARV	Antiretroviral
BATS	Bureau of AIDS, Tuberculosis, and Sexually Transmitted Infections, Ministry of Public Health
BCC	Behaviour change communication
BSS	Behavioural surveillance survey
CBO	Community-based Organization
CMHI	Compulsory Migrant Health Insurance
CSEARHAP	Canada South East Asia Regional HIV/AIDS Project
ECAT	Enhancing HIV-Related Care and Treatment for HIV-Infected Mothers, their Partners and Children
GPP	Gross provincial product
GFATM	Global Funds to Fight AIDS, Tuberculosis and Malaria
HIV	Human immunodeficiency virus
ID	Identification
IPSR	Institute of Population and Social Research
IOM	International Organization for Migration
KAP	Knowledge, attitude and practice
MOI	Ministry of Interior
MOL	Ministry of Labour and Social Welfare
MOPH	Ministry of Public Health
MOU	Memorandum of Understanding
MSF	Médecins Sans Frontières
NAPHA	National Access for Antiretroviral Program for People Living with HIV/AIDS
NGO	Non-governmental organization
OI	Opportunistic infection
OOP	Out-of-pocket payment
OTDSAR	Office of Technical Development to Support HIV/AIDS Response, Department of Disease Control, Ministry of Public Health
PATH	Program for Appropriate Technology in Health
PHAMIT	Prevention of HIV/AIDS among Migrant Workers in Thailand
PHIM	Prenatal HIV intervention monitoring system
PHO	Provincial Health Office
PLHA	People living with HIV and AIDS
PMTCT	Prevention of mother-to-child transmission
RTF	Raks Thai Foundation
STI	Sexually transmitted infection
TBBC	Thai-Burma Border Consortium
VCT	Voluntary counseling and testing for HIV
VMHI	Voluntary migrant health insurance
WVFT	World Vision Foundation of Thailand
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNHCR	United Nations High Commissioner for Refugees

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EXECUTIVE SUMMARY

Background:

With the growing economy and relatively stable society, Thailand has long been a hub for migration in Greater Mekong Sub-region, particularly for labour migrants from the three neighbouring countries namely Myanmar, Cambodia and Lao PDR. It is estimated that over two million migrants are living and working in Thailand, in addition to some 150,000 displaced persons and asylum seekers who seek refuge in nine temporary shelters along the border. Recognizing the potential impact of migration on the Thai health system, the Ministry of Public Health (MOPH) has included migrants as an important target population in various strategies including the National AIDS Strategy (2007-2011) and the Master Plan on Mobility and HIV, which are formulated in collaboration with relevant sectors.

To develop effective Human Immunodeficiency Virus (HIV)/ Acquired Immunodeficiency Syndrome (AIDS) prevention and care policies and programmes for migrants in Thailand, MOPH needs accurate and reliable strategic information for evidence-based programming. There is a substantial amount of raw data on sexually transmitted infections (STIs) and HIV/AIDS among migrant populations in Thailand. However, the data are not well analysed and utilised for programme design and planning. To assist the MOPH and other stakeholders on data analysis and use to ensure that the programmatic response is technically sound and evidence-based, this study was conducted with the following specific objectives:

1. To compile existing biological and behavioural data as well as programme services related to STIs/HIV/AIDS among migrants and selected Thai population groups in the host communities;
2. To comprehensively analyse the data/ information compiled and determine gaps on current related information systems and STIs/HIV/AIDS programmatic responses;
3. To provide recommendations for strengthening future information systems as well as STIs/HIV/AIDS programme for migrant populations and other related populations; and
4. To strengthen the health authority's capacity in maximising the use of existing data.

Scope and Methodology:

The study involved collection of existing data from 10 selected provinces namely: Samut Sakhon, Trat, Prachuap Khiri Khan, Ranong, Phang Nga, Sa Kaeo, Mukdahan, Nong Khai, Tak and Chiang Rai. The 10 provinces were selected based on their: 1) representativeness of the various geographical contexts and characteristics; 2) large presence of migrant populations from neighbouring countries; 3) availability of data for the triangulation analysis; and 4) existing collaboration amongst local health and other line authorities, the International Organization for Migration (IOM) and the Canada South East Asia Regional HIV/AIDS Project (CSEARHAP) that can help facilitating the data collection from various sources.

The study compiled as much as possible available data on STIs/HIV/AIDS among various groups of migrant population in the selected provinces within the years 2003 and 2007. The key data collected were number of migrant population, registered and unregistered; STIs and HIV sero-prevalence in various Thai and migrant population groups; reported migrant HIV/AIDS cases; knowledge and practice on STIs/HIV in interested population groups; and STIs/HIV/AIDS services for migrant population. Data were systematically collected from Provincial Health Offices, public hospitals, Department of Labour Employment, international and local non-government organisations, and academic institutions. Several interviews with key government and non-government stakeholders were also conducted to gain more insights into the local responses to STIs/HIV/AIDS. A series of consultative meetings were held at the central and provincial levels to explain the process and methodologies used as well as to verify the data obtained.

Key Findings and Recommendations:

Current several migrant health information systems provide a broad range of relevant information but yet insufficient and require an improvement.

There are several migrant information systems being managed by different line ministries due to the different mandates and needs. Within the MOPH alone, there are seven databases related to migrant health including four STIs/HIV/AIDS related. It is a big challenge to effectively utilise these databases for programme planning since definitions, criteria and the types of health as well as migration data vary widely.

To enhance the strategic information system, ideally the multiple fragmented systems should be integrated into one comprehensive system or at least make them compatible, while the STIs/HIV/AIDS surveillance system that includes also migrant population should be made an official mandate rather than relying on the interest of local health offices. It is understandable that the ideal solution takes time to accomplish, and therefore, a short-term action in improving the quality of the data being collected e.g. application of standard protocol and indicators such as category of migrant groups, case definition and the report/ survey timeline is also recommended. The data triangulation as demonstrated through the process of this project is an alternative to the systematic comprehensive surveillance system in maximising the use of existing data. However, to follow the recommendations, it is necessary to first enhance understanding and skills of relevant government officials at all levels on migration and health, data collection and analysis as well as on how to “cook” the various types of data from various sources.

Diverse migrant population groups and their STIs/HIV/AIDS situations require diverse strategies and approaches.

It is important to note that migrants do not reside only in the border provinces adjacent to their home countries. They are found in all 76 provinces of Thailand and a large number of Myanmar migrants can be found as far as in the provinces adjacent to Cambodia and vice versa. Some Vietnamese migrants can also be found in some inner cities of Thailand. The STIs/HIV/AIDS situations among various migrant groups in different provinces also vary widely but overall the HIV prevalence among migrants tends to be many times higher than that of Thais, which reflected by some reports on unsafe sex practices among them. From this study, it appears that the overall pattern of HIV/AIDS epidemics among migrants in Thailand could be divided into four categories: 1) the old epidemic among migrant “labourers” who already developed signs and symptoms; 2) new infections among some high risk migrants; 3) female migrants who could be infected from their male partners as the infection rate among pregnant migrant women tend to be high; and 4) children of HIV positive migrants.

Migrant seafarers are usually claimed to be a high risk group and this study found that they were the most studied migrant group and, thus, most targeted by different HIV/AIDS programmes for migrants. However, this study found that majority of the reported migrant HIV symptomatic and AIDS cases in all studied provinces are “labourers”, and that there are some studies suggest that other migrant groups, especially migrant sex workers, are also at risk for contracting HIV. From this study finding, even after the data triangulation, it is still unclear who the most-at-risk groups are among the broader migrant population. Since AIDS is a disease with a long incubation period, the areas with higher numbers of reported symptomatic HIV/AIDS cases do not necessarily represent the areas with high risk for the infection as patients might have long been infected in other areas prior to their migration. However, the presence of the reported HIV/AIDS cases indicates the existence of a key factor contributing to the epidemic – the HIV itself. Accordingly, it is important to further explore the situation among different migrant groups in different settings so that priority can be appropriately decided for appropriate allocation of limited resource for the greatest impact on the epidemic. Complex networks between migrants

and other mobile populations may place less vulnerable people at risk of the disease, either they be migrants or Thais. It should be taken into consideration also the interaction of migrants and other populations in the local communities since the virus can get across the “bridging populations” between the lower and higher prevalence groups. Once the priority is set, a large enough scale for a comprehensive programme on continuum from prevention to care, treatment and support should be implemented to ensure that the investment has a significant impact on the epidemic as the present programmes do not seem to reach sufficient level of coverage.

Unfortunately, it is difficult to obtain specific strategic information for priority setting and the biggest challenges for the programme planner are to consider whether to target or not to target certain populations and to do so with limited resources. While implementing targeted intervention for most-at-risk groups is the most effective way to control the epidemic, targeting inappropriate groups could do more harm than good. This is not only because the resource and effort will be wasted but it also means that those who are in need do not receive the services which in turn will not help reducing the magnitude of the epidemic but rather to let it increased. In addition, some population groups may mistakenly be labeled as the “source of infection” which could bring about the issue of stigma and discrimination. With the current situation that data are inadequate to draw specific conclusions, it may be more appropriate to implement the programme in the “risk zone” covering diverse populations where risk behaviours are observed than trying to pinpoint the “hot spot” or the business sector with specific population group.

Conclusion:

Evidence-based programming is essential to maximise the limited human and financial resources available to HIV/AIDS programme for migrants. Although a number of routine surveillance and ad hoc surveys have been implemented to date, the findings derived from these sources are often fragmented. Responding to the health and HIV/AIDS needs of migrants is a challenge for Thailand, particularly given the dynamic, diverse sub-populations within the migrant population, their diverse background on HIV/AIDS related knowledge and practices, as well as the lack of concrete policy and national budget for migrants. To draw a concrete conclusion and recommendations for appropriate programming, a more rigorous data is definitely required. However, this study could collect data from various official and unofficial sources with a great deal of cooperation from various government and non-government sectors and could observe some trends of the epidemics that provide some big picture of the current situation. Most importantly, this study could demonstrate an interim approach for improving the programme planning through the data triangulation methodology. It is anticipated that the processes and methodologies used in this study will be considered and implemented for the future HIV/AIDS programming for migrants and their communities.

Chapter I.

Introduction



CHAPTER I. INTRODUCTION

1. Background

The Kingdom of Thailand's fast growing economy has drawn large numbers of migrant workers and mobile populations from around the region seeking better living and working conditions into the country. Between 1988 and 1992, the Thai economy started to grow at an unprecedented rate. Frequent labour shortages in vital economy-driven and labour intensive sectors such as the industrial, fishing and agricultural sectors attracted many migrant communities. The Thai government was pressured by three key business organisations, namely the Thai Chamber of Commerce, the Federation of Thai Industries and the Thai Bankers' Association to allow businesses to hire migrant workers (Achavanitkul, 2006). It is estimated that nearly two million documented and undocumented migrants were living and working in Thailand in 2004 (Huguet and Punpuing, 2005). In addition to allowing migrants to seek employment in Thailand, the Thai government has been providing a refuge for displaced persons and asylum seekers, mostly from Myanmar. Recognizing the potential impact of migration on the Thai health system, the Ministry of Public Health (MOPH) has included migrants as an important target population in the National AIDS Strategy for 2007-2011 and the Master Plan on Mobility and HIV, which are being formulated in collaboration with relevant sectors.

To formulate effective Human Immunodeficiency Virus (HIV)/ Acquired Immunodeficiency Syndrome (AIDS) prevention and care policies and evidence-based programmes for migrants in Thailand, MOPH needs accurate and reliable strategic information. There is a substantial amount of raw data on sexually transmitted infections (STIs) and HIV/AIDS among mobile and migrant populations in Thailand available at the local level. However, the data are often collected based on various sets of key indicators in various formats for various purposes. It is necessary for MOPH to develop a set of standardized indicators to be used at all levels as well as to compile, process and manage the data systematically in order to facilitate future policy development and programme implementation.

With financial support from the Joint United Nations Programme on HIV/AIDS UNAIDS/Thailand and the Canada South East Asia Regional HIV/AIDS Project (CSEARHAP), the Office of Technical Development to Support HIV/AIDS Response, Department of Disease Control, (OTDSAR) under Department of Disease Control of MOPH and International Organization for Migration (IOM) were commissioned to implement the project entitled "Migration and HIV/AIDS in Thailand: Desk Review, Bibliography, and Synthesis of Data". This report is a part of the project that aims to identify gaps of STIs/HIV/AIDS epidemiological and behavioural data and STIs/HIV/AIDS prevention and care services for mobile and migrant populations in Thailand. In order to complement this report, a desk review report, "Migration and HIV/AIDS in Thailand: A Desk Review of Migrant Labour Sectors" was published in 2008.

2. Study Sites

Ten provinces of Thailand were selected for the study based on the following criterias: 1) representative of the various geographical contexts and characteristics of provinces in Thailand (such as land and sea border provinces); 2) a large presence of migrant populations from neighboring countries in the province; 3) availability of sufficient data/information for the data triangulation analysis; and 4) an existing collaboration between local health authorities and IOM, OTDSAR and CSEARHAP that can help facilitate the data collection from various official and unofficial sources.

The following provinces chosen have porous borders with neighbouring countries and have diverse characteristics of the different regions of Thailand. Several of the selected provinces meet all the criteria for the study site selection. However, with a series of consultative meetings with the technical officers of the MOPH at the central level as well as with the local health authorities, a total of 10 provinces were selected for this study. These include seven provinces along the borders of Thailand and the Union of Myanmar (Myanmar), Thailand and Lao People's Democratic Republic (Lao PDR), and Thailand and the Kingdom of Cambodia (Cambodia) and three coastal provinces of Thailand.

The list of selected Provinces are as follows:

- Thailand-Myanmar border; Chiang Rai, Tak and Ranong Provinces
- Thailand-Lao PDR border; Mukdahan and Nong Khai Provinces
- Thailand-Cambodia border; Sa Kaeo and Trat Provinces
- Coastal provinces; Samut Sakhon, Prachuap Kiri Khan and Phang Nga Provinces

3. Methodologies

The aim of the study was to compile and analyze available data on STIs, HIV infections and AIDS among migrant population in the 10 selected provinces within the years 2003 and 2007. In addition, the study explored the existing gaps in the programmatic responses to STIs/HIV/AIDS in migrant population as well as the current situation of relevant migrant population database system in the government sector. The study commenced from January 2007 and was completed in July 2008.

Data were systematically collected for each selected province from Provincial Health Offices (PHOs), public hospitals, relevant local government offices such as Department of Labour Employment, MOPH, international and local non-government organisation (NGOs), academia and other related sources. The data collected focused on the following key areas:

- Number of migrant population and registered migrant workers,
- STIs and HIV sero-prevalence in Thai and migrant populations,
- Knowledge, attitude and practice (KAP) survey data in interested population groups,
- Health service data including STIs/HIV/AIDS prevention, care and treatment, including antiretroviral therapy (ART), and
- Relevant programmes addressing migrant population as well as current responses and actions.

It should be noted that alcohol consumption and subsistence use are sometimes reported among migrant population but injecting drug use is uncommon in the reporting. As the data on alcohol and subsistence uses among migrants are scarce and it is difficult to find the evidence on the direct link between alcohol and/or subsistence usage with an increased risk of contracting HIV among the studied populations, this information is not included in the study.

In order to effectively involve local government offices in this study, the OTDSAR took the lead in coordinating and discussing with the 10 participating PHOs. Throughout the study implementation phase, OTDSAR and IOM coordinated and organised a series of workshops with the 10 PHOs to collaboratively plan, compile and conduct in-depth analysis of available data in the respective provinces. Throughout the process, technical resource persons from academia, MOPH and IOM assisted each PHO official in-charge of HIV/AIDS work in the data identification, collection, analysis and interpretation. Key data gathering tools and guidelines were developed in consultation with IOM, OTDSAR and the Bureau of AIDS, Tuberculosis and Sexually Transmitted Infections (BATS) of MOPH and distributed to each participating province for a standardised data gathering.

During the last phase of the project, several interviews with key stakeholders were conducted by the authors to gain more insights into the local responses to SITs/HIV/AIDS. Some of the key persons such as programme managers and field coordinators from the relevant NGOs implementing activities in the selected provinces were contacted for interviews. Simultaneously, the interviews were a good opportunity to hold meetings with PHOs for data verification.

4. Definition of Mobile and Migrant Populations in this Study

This study on migration and HIV/AIDS data triangulation was initially intended to study all types of migrant population existing in the 10 selected provinces such as, migrant workers, ethnic populations and displaced persons. However, this proved too challenging to obtain the relevant datasets and documents related to the other types of migrant populations other than migrant workers from the three cross-border countries – Myanmar, Lao PDR and Cambodia. Therefore, this report mainly focuses on migrant workers and the term “migrant population” and “migrant workers” are used interchangeably in the report. Both of these terms refer to the migrant worker group that is, both documented and undocumented.

5. Limitations of the Study

The data compilation was very time consuming because of the various formats and management systems of the datasets. There was also competing priorities and work over-load among the officers in-charge of PHOs, making it difficult for them to keep to their intentional contributions for this study. Moreover, the data compilation required key gatekeepers to be involved at the provincial level. It was also noted that the data system management and definitions in relation to migrant and mobile populations were significantly different from province to province resulting in some difficulties to fit them into the same standardized tools produced by the project, and this consequently caused considerable time cost for data compilation, verification and analysis.

Chapter II.

Overview of
Migrant Policy
and Data
System in
Thailand

CHAPTER II. OVERVIEW OF MIGRANT POLICY AND DATA SYSTEM IN THAILAND

This chapter provides an overview of three main issues concerning migrant workers in Thailand: 1) government policy on migrant worker registration; 2) migrant's health and STIs/HIV/AIDS surveillance system; and 3) migrant healthcare financing system. The three issues presented portray the available data and reporting systems currently used for migrant populations in Thailand. Therefore, the reporting systems are complex and the data from the various available sources on policy and programme strategies are a challenge to comprehensively compile and respond to the health needs, particularly on STIs/HIV/AIDS, of the migrant population groups.

1. The Government Policy on Migrant Worker Registration

Acknowledging that migrant workers are a necessary component of the workforce, the Royal Thai Government has allowed undocumented migrant workers to register for work permits since 1996. The first registration system was developed to provide two-year work permit for undocumented migrant workers already working and living in Thailand. A study by *Achavanitkul et al.* reported that during the years 1996-2006, the Thai Cabinet introduced 11 Resolutions to control and manage migrant workers (Table 2.1) which is summarised in the following three phases:

1. Cabinet Resolutions during 1996-2000

Registration of migrant workers only: Employment was limited to selected industries in selected provinces. Employers had to accompany migrant workers to the registration site.

2. Cabinet Resolutions during 2001-2003

Registration of migrant workers only: The registration was opened for employment nationwide but only in selected industries.

3. Cabinet Resolutions during 2004-2006

Registration of migrant workers and dependents, and registration of employers: A thirteen-digit identification (ID) number, starting with [00], was given to each worker and dependent.

In 2007 the Cabinet Resolution granted an extension of one year for migrant workers whose work permits were due to expire in 2007. Migrant workers had to undertake a medical examination before applying for an extension of their work permits. (Department of Employment, Ministry of Labour and Social Welfare, 2007)

Table 2.1 Number of Migrant Workers Granted Work Permit According to the Cabinet Resolution, 1996-2006

Year of Cabinet Resolution	Permitted Industries/ Sectors	Permitted Provinces	Permitted Period	No. of Migrants Holding Work Permits	Country of Origin		
					Myanmar	Cambodia	Lao PDR
1996	36	43	2 years	293,654	256,492 (88%)	25,568 (7%)	11,594 (5%)
1998	47	54	1 year	90,911	79,057 (87%)	10,593 (12%)	1,261 (1%)
1999	18	37	1 year	99,974	89,318 (89%)	9,492 (10%)	1,164 (1%)
2000	18	37	1 year	99,656	90,724 (91%)	7,921 (8%)	1,011 (1%)
2001	11	Nationwide	6 months	568,249	451,335 (79%)	57,556 (10%)	59,358 (11%)
2002	11	Nationwide	1 year	430,074	349,264 (81%)	38,614 (9%)	42,196 (10%)
2003	6	Nationwide	1 year	288,780	247,791 (86%)	19,675 (7%)	21,314 (7%)
2004	2	Nationwide	1 year	834,943	625,886 (75%)	103,807 (12%)	109,250 (13%)
2005/1	2	Nationwide	1 year	705,293	539,416 (76%)	75,804 (11%)	90,073 (13%)
2005/2	2	Nationwide	1 year	208,560	163,499 (79%)	23,410 (11%)	21,653 (10%)
2006	2	Nationwide	1 year	460,014	405,379 (88%)	24,952 (5%)	29,683 (7%)

Source: Achavanitkul et al., 2007

Management of Migration According to the Cabinet Resolution

Between 2001 and 2003, the number of registered migrant workers dropped from 568,249 to 288,780. The decrease was not because there was less number of migrant workers but rather, it was due to the nature of the registration system only allowing those who had been previously registered to re-register again. In an effort to register all migrant workers and dependents in the country, the government developed a new registration system in 2004, employing the Thailand household registration system for the migrant registration process. The Migrant registration process was divided into the following four stages:

1. The District and Provincial Administrative Offices under the Ministry of Interior (MOI) is responsible for this stage – the registration of migrant workers and dependents for temporary ID cards and registration of employers stating their needs for migrant workers.
2. Under the care of the designated health unit in the MOPH, compulsory medical examination of MOI's registered migrants applying for work permits is conducted.
3. Registration for work permits for those who pass the medical examination and obtain the health insurance card from the MOPH is coordinated by the Provincial Office of Employment under the Ministry of Labour and Social Welfare (MOL), and
4. With regularisation of migration and verification of nationality as agreed upon in the Memorandum of Understandings (MOUs) on Employment Cooperation with neighbouring countries.

Similar to other population groups, migrant workers and dependents have to report birth, death and house transfers. The Form TR 38/1 is used for this purpose. Through the launch of household registration in 2004, more than 1.2 million migrants from the three neighbouring countries registered with the MOI and 834,943 migrant workers were granted work permits (Achavanitkul et al., 2007). However, since 2004 the numbers of migrant workers registering has consistently been declining.

The Department of Employment of the MOL indicated that 85% of migrant workers from Myanmar, 42% of migrant workers from Lao PDR and 51% of migrant workers from Cambodia had work permits that expired in 2007 went on to apply for an extension to their work permit. The main reasons that migrant workers did not apply for the work permit extension were:

1. Most migrant workers are economically disadvantaged, especially the agricultural sector workers. The agricultural workers cannot afford the costs for their registration and work permit extension which is approximately 7,300 Bahts (approximately USD 200) per year. Migrant workers in the manufacturing sectors are less affected by this regulation because their employers usually pay their fees in advance.
2. Migrant workers are not permitted to work outside the registered province or to change their employers without receiving a formal agreement from their employers. Many migrants choose to drop out from the work permit extension process when they decide to change their jobs.
3. Some female migrant workers are married to Thai men and are less likely to apply for the work permit extension.
4. Some migrant workers obtain support from acquaintances to avoid being arrested and deported by officials. They move around in their day jobs as domestic workers to avoid the authorities.
5. Some employers are not supportive of the migrant worker registration fee because of the high advance fee they incur.
6. The registration was not an open system because only migrants who registered and obtained the work permit in 2004 were allowed to extend their work permit in 2005. Also only those who renewed their work permit in 2005 were eligible for the work permit extension in 2006 and 2007, consecutively.
7. The renewal of the registration each year is allowed only during particular times, i.e. only two one-month periods per year. If any migrants miss their opportunity to apply for the work permit extension they would no longer be eligible to obtain their new work permit.

It should be noted that the registration system launched in 2004 still continues at the time of this report writing although minor adjustments are made each year to make the registration more attractive and encouraging for migrants and employers. During October 2008, there were some discussions within the government on re-establishing a new round of registration for migrants and dependents living and working in Thailand. It did not matter if they had previous registration or not, but the idea was to ascertain how many migrants resided in Thailand. In parallel with the registration of illegal migrant workers already living in Thailand, the government signed the MOUs with the governments of neighboring countries to engage them in the processes to systematically manage migration and control illegal and irregular migration. The first MOU was signed with the government of Lao PDR in October 2002, followed by similar MOUs with Cambodia in May 2003 and with Myanmar in June 2003. As of September 2006, the Department of Employment reported on only Lao PDR workers receiving the Thai working visas under the MOU implementation. There were a total of 2,016 migrant workers since 2004.

2. Migrant Health and STIs/HIV/AIDS Surveillance Systems

The general surveillance of diseases and STIs/HIV/AIDS in migrant populations in Thailand currently involves four database systems:

2.1 Communicable Disease Surveillance

Under the public health surveillance system of the MOPH, 68 diseases and infections are closely monitored, using Forms 506, 506/1, 507 when reporting. The Form 506 is used for communicable diseases based on clinical diagnoses made by physicians working in the health facilities. Care providers, especially the MOPH's affiliated, are obliged to immediately inform the local public health authorities when any health case is detected. If the clinical diagnosis is changed physicians need to send a notification change card which is Form 507. Included in the 506 form are the reports on STIs and HIV/AIDS related opportunistic infections (OIs) such as tuberculosis, meningococcal meningitis, carinii pneumonia, and so forth.

A separate form is used for HIV/AIDS case surveillance reporting. District and provincial hospitals regularly submit reports of AIDS cases and deaths using 506/1 form to the PHO. Initially hospitals were instructed to report both HIV positive cases and AIDS patients. However, due to difficulties in defining these groups and the lack of active surveillance to obtain a more reliable surveillance data on HIV positive cases, only symptomatic HIV and full-blown AIDS patients are reported. Consequently, reported cases constitute only a fraction of the estimated total.

More recently, the Bureau of Epidemiology of the MOPH has decentralised data collection and analysis to the provincial health offices as a way of enabling them to utilize the information for the formulation of local strategic responses. This implies that some of the data were not submitted to the Bureau at the central level as in the past.

2.2 Sentinel Sero-surveillance of STIs/HIV/AIDS

The first sentinel sero-surveillance system to monitor HIV prevalence among the Thai population was launched in June 1989. Two sets of target groups such as, high risk populations (male and female sex workers, injecting drug users and male clients of STIs clinics) and the general populations (blood donors, antenatal clinic attendees and newly recruited military conscripts), were included in the survey. From 1989 to 1995, the surveys were conducted regularly at six month intervals – that is June and December. Since 1995 to present only one survey has been conducted each year because the infection trends among the standard sentinel groups is stabilized (Phoolcharoen, 2006).

Prior to 2004, studies of HIV prevalence among migrant workers were sporadic. In 1996 a study was conducted among construction workers, agricultural workers and fishermen in Samut Sakhon, Phang Nga, Tak, Chumporn, Chiang Rai and Kanchanaburi Provinces. In 1998, the sentinel sero-surveillance was extended to cover migrant crews of deep sea fishing boats in nine port provinces (Trat, Samut Sakhon, Prachuap Khiri Khan, Chumporn, Ranong, Phuket, Songkhla, Trang and Pattani). Foreign antenatal clinic attendees in 14 provinces of Thailand were included in target populations of the sentinel surveillance in 2001. Later in 2004, with the technical support from the Bureau of Epidemiology, a number of provinces began to develop local information monitoring in response to their specific HIV/AIDS situation (Lohlohakarn, 2004). Following the methodology of the HIV sentinel sero-surveillance, they developed new approaches to assess behaviours and identified new target

groups. Some border provinces and those with a high number of migrant workers expanded their sentinel sero-surveillance target populations to cover migrant workers.

2.3 Behavioural Surveillance Survey

The first Behavioural Surveillance Survey (BSS) among the general population was conducted in collaboration with Thai Red Cross and Chulalongkorn University in 1990. The second such BSS was conducted by the Institute of Population and Social Research (IPSR), Mahidol University in 1993.

Two years later, the Bureau of Epidemiology launched the national BSS, covering 20 provinces and four target populations: male and female factory workers, antenatal clinic attendees and military conscripts. The target populations were expanded to male and female students in grade 11 in 1996, grade 8 students and vocational school students in 2003 and female sex workers in 2004. There was no request from the central authority to the provinces to conduct BSS amongst migrant workers but some provinces decided to apply this research approach to some migrant population groups yet this was limited in covering the majority of migrant communities.

During the process of data collection for this study, the insufficiency of information and results gathered from BSS of migrant population in various provinces is observed. One major reason for this is the inappropriate BSS tools used for assessing the migrant population. The BSS tools used for migrant communities were the same tools used in the Thai population. However, the BSS tool used does not fully reflect the characteristics of the migrant populations such as their migration and mobility patterns and the diversity of occupations undertaken by migrants.

2.4 Surveillance of HIV in Newborns

Surveillance of HIV in newborns which was launched in 2000 and was developed to monitor and assess the efficacy of the national programme for prevention of mother-to-child transmission of HIV (PMTCT). Newborns of HIV positive mothers are registered and monitored from the delivery date until their HIV status are verified. Surveillance of HIV in newborns provides information on mother-to-child transmission rate as well as awareness and access to the PMTCT service.

A few provinces have been able to start developing their database system to monitor HIV/AIDS in migrant pregnant women. Some have participated in the MOPH's Enhancing HIV-related Care and Treatment for HIV-infected Mothers, their Partners and Children (ECAT) Project. This is a pilot project funded by the Global Funds to Fight AIDS, Tuberculosis and Malaria (GFATM) and includes PMTCT benefits to migrant pregnant women and their families. This is also recognised as a reliable data source for HIV sentinel surveillance in migrant pregnant women.

3. Migrant Healthcare Financing Systems

Since 1996, when the cabinet resolution permitted registration of migrant workers in 36 provinces, migrant workers have to undertake compulsory medical examination. The compulsory medical examination aims to prevent re-emergence of selected communicable diseases and reduce government medical expenses incurred by migrant workers (Achavanitkul et al, 2007). The criteria for the medical examination are similar for Thai applicants who are seeking government job opportunities. Of the six health conditions that need follow-up (permitted to work if treated) are: 1) tuberculosis; 2) leprosy; 3) filariasis; 4) syphilis; 5) malaria; and 6) intestinal

parasites. The seven health conditions that are considered unfit to work are: 1) mental disorder/retardation; 2) drug addiction; 3) alcoholism; and the contagious stage of: 4) tuberculosis; 5) leprosy; 6) filariasis; and 7) syphilis.

Results of the compulsory migrant medical examination are grouped into four categories as listed in Table 2.2.

Table 2.2 Category of Migrant Medical Examination

Category	Description	Recommendation
I	Tested negative	Permitted to work
II	Tested positive	Follow-up required and permitted to work if treated and cured.
III	Tested positive (contagious stage)	Not permitted to work and need to provide treatment and deport back to country of origin.
IV	Pregnancy	Inform employers of the pregnancy to avoid the work that could affect the pregnant outcome.

The first health insurance programme for migrant workers was launched in 1997, following the cabinet resolution which permits MOPH to charge annual health insurance premiums of 500 Bahts or more per migrant worker. Later in 2001, the annual medical examination fee and health insurance premiums were raised to 300 Bahts and 1,200 Bahts respectively. Insured migrant workers are entitled to a similar benefit package as Thai citizens enrolling in the National Universal Health Coverage Scheme (formerly called “30 Baht Scheme”). However, if they required medical services, migrant persons’ have to report to the same health facility at which they had their initial medical examination. With the exception of migrant fishermen who can access emergency services in the 22 coastal provinces all other migrants are limited to clinics and/or hospitals within their registered provinces for emergency services. A 30 Baht co-payment per visit is required for registered migrants to access health services. In 2004, when the Thai government permitted registration of migrant workers and their dependents, the annual medical examination fee and health insurance premiums were increased to 600 Bahts and 1,300 Bahts (approximately USD 17 USD and USD 35) respectively. As of 2008, health examination and insurance are compulsory for documented migrant workers. However, voluntary migrant health insurance (VMHI) is available for dependents of migrants on an ad-hoc basis.

During 2004-2006, a study at five sites – central MOPH, Samut Sakhon, Ranong, Kanchanaburi, and Tak reported that Compulsory Migrant Health Insurance (CMHI), hospital exemptions, and out-of-pocket payment (OOP) are three major financing sources for curative care of migrant population (Srithamrongsawat et al., 2009). In 2006, CMHI revenues, hospital exemptions and OOP accounted for 60%, 21% and 19% of the total expense for migrant health care, respectively.

Results from the study indicated that overall average expenses of outpatient and inpatient curative service provided per registered migrant in three years remained less than the collected revenues. Many hospitals, especially those with greater than 10,000 registered migrants, have gained from CMHI because of relatively low utilization of CMHI members. However, this is not the case for hospitals in border provinces such as Chiang Rai, Kanchanaburi, Tak and Trat where there are large numbers of undocumented and uninsured migrants as well as those who live outside of Thailand and cross the border to attend the health services in these border provinces of Thailand.

The results correspond with the study findings from Tak and Trat Provinces for the same period. Unfortunately, the information on the number of CMHI cards issued, the service utilization and costs in other eight target provinces of this study cannot be retrieved. This clearly indicates that there is an urgent need to improve the migrant healthcare financing database system.

4. Limitation of Available Migrant Data Systems

From previous sections, there are at least nine relevant migrant worker database systems that are being compiled by various governmental departments: 1) household registration (TR 38/1), 2) work permit, 3) medical examination, 4) CMHI, 5) VMHI, 6) infectious diseases surveillance (506 Report), 7) HIV/AIDS sentinel sero-surveillance (506/1 Report), 8) PMTCT database and 9) migrant healthcare service utilization and cost. These existing databases involve three ministries: 1) MOI for household registration (TR 38/1), 2) MOL for work permit, and 3) MOPH for the seven health databases.

Although the seven health databases of migrant population are kept at the PHOs and network health facilities, retrieval of the database systems was extremely complicated because they are kept in various units. Moreover, some datasets of migrant population are not necessary for routine reporting, such as medical health examination results of migrant workers and STIs case reporting. The network health facilities keep the migrant health records in various formats, which make it difficult to compile the data when needed. Because of the diverse levels of interest, available manpower, budget and various local and national needs, the design and target populations of the surveillance and related surveys are not uniform. The design of the Form 506/1 as well as of BSS is neither sufficiently comprehensive for an in-depth analysis of migrant sub-populations, nor is it appropriate for migrant contexts.

Despite relatively comprehensive and flexible surveillance systems of STIs/HIV/AIDS in Thailand existing systems are still faced with many challenges. For instance, only few provinces are able to establish their own surveillance programmes due to insufficient budget and skills in survey design, implementation and analysis. Also, STIs/HIV/AIDS surveillance data are scattered in various government units. An information system to retrieve and integrate existing data from various studies and sources – including STIs information, behavioural studies, mortality data, PMTCT data – in the HIV surveillance systems has yet to be fully developed. With all these challenges the dissemination of data of migrant population from some sources has been very limited.

Chapter III.

Migrants and
STIs/HIV/
AIDS in the
10 Studied
Provinces

CHAPTER III. MIGRANTS AND STIS/HIV/AIDS IN THE 10 STUDIED PROVINCES

Migrant workers in the 10 studied provinces continue to play a vital role to economic development in Thailand over the past 10 years. At the time of this study, the registered migrant workers in the 10 studied provinces combined were more than half of the total registered number in all 76 provinces of Thailand. The actual number of migrant populations from the three neighbouring countries both documented and undocumented is believed to be three to four folds higher than the registered number. Migration and mobility contexts and conditions are key factors contributing to the vulnerabilities of migrants in its many facets, such as, health, HIV/AIDS and labour exploitation.

By utilizing data and information retrieved from local authorities and the central government's departments involved in migrant population as well as NGOs working with migrants in the studied sites, this chapter highlights the results from all the analysis conducted. The analysis focused on general migrant profiles and STIs/HIV/AIDS situations and addresses the programme responses to HIV/AIDS in the migrant population of the studied provinces.

1. Characteristic of Studied Provinces

The diversity of geographical and economical situation of the ten provinces has an impact on the demography of migrant populations. The long boundaries with Myanmar, Lao PDR and Cambodia hinder efforts to control large-scale cross-border migration into Thailand. Chiang Rai, Tak, Mukdahan, Nong Khai and Sa Kaeo are land border provinces whereas, Trat, Prachuap Khiri Khan and Ranong are both land and coastal border provinces and Samut Sakhon and Phang Nga are coastal provinces.

Eight of the 10 studied provinces, with the exception of Samut Sakhon and Phang Nga, share their land borders with neighbouring countries (Appendix A, Summary of Geographic and Economic Characteristics of the 10 Studied Provinces). The total length of land boundary that Thailand shares with Myanmar is 2,202 km. Four of the studied provinces: Chiang Rai and Tak in the northern region, Prachuap Khiri Khan in the central region and Ranong in the southern region are located along this geographic area. A part of Phanom Dongrak Range forms the Thailand-Lao PDR boundary, with a total length of 640 km. The rest of the boundaries follow mainly the Mekong River, totaling 1,100 km. in length. Three of the studied provinces are situated along this border: Chiang Rai in the northern region and Nong Khai and Mukdahan in the northeastern region. The boundary with Cambodia is 1,616 km. long. Sa Kaeo and Trat Provinces are located on this geographic area.

Regarding the economic situations of the provinces, the urbanized setting of Samut Sakhon is claimed to be the second largest economy in Thailand after Rayong, and the largest among the 10 studied provinces, with Gross Provincial Product (GPP) per capita of 494,635 Bahts (approximately 14,548 USD) in 2004. On the other hand, Nong Khai's economy is the smallest among the 10 target provinces, with the GPP per capita of only 26,215 Bahts (approximately 750 USD) in the same year (Appendix A, Summary of Geographic and Economic Characteristics of the 10 Studied Provinces).

While border provinces are trying to capitalize on the rapid growth of the Indochina trade, the main sources of income for most of provinces in this study is derived from labour intensive agriculture, fishery and downstream industries. Samut Sakhon and Prachuap Khiri Khan are the only two economies that are dominated by manufacturing.

Migration and HIV/AIDS in Thailand:

Triangulation of biological, behavioural and programmatic response data in selected provinces

Map of Thailand Depicting Geographic Locations of the 10 Studied Provinces



2. Migrant Profile

Approximately two and a half million migrants, both documented and undocumented are estimated to live and/or work in Thailand. In 2004, a total of 834,943 migrant workers from the three neighbouring countries, namely, Myanmar, Cambodia and Lao PDR, were granted work permits. The number decreased significantly after 2004. In 2006, only half of the registered migrant workers in 2004 maintained their registered status, with only 460,010 migrants in number.

Nearly 80% or 1.5 million of the migrant workers in Thailand come from Myanmar (Department of Employment, MOL, 2006). Most of them are unskilled and tend to work within a variety of low paid jobs such as, daily labourers, factory workers, fishermen and seafood processors, farm workers, sex workers, and domestic workers. This statement particularly reflects the characteristics of migrant workers from Myanmar in the seven studied provinces of Chiang Rai, Tak, Samut Sakhon, Trat, Prachuap Khiri Khan, Phang Nga and Ranong. While migrant workers from Myanmar in Chiang Rai and Tak are mostly employed in border trade, manufacturing and agricultural sectors, their peers in coastal provinces are mostly employed in fishery and seafood processing plants.

A total of 181,579 Cambodian migrants, 68% men and 32% women, reported themselves to the Thai authorities during the opening of registration in 2004. Unofficially, it was estimated that Thailand hosted as many as additional 80,000 unregistered Cambodian migrants in the same year (IOM, 2004). Economic stability is the primary factor for their migration with the majority being employed as fishermen, mill workers, farm workers, construction workers and a variety of low wage labour. For instance, most Cambodian migrant workers in Sa Kaeo Province are employed in border trade and agriculture sector, whereas about half of their counterparts in Trat Province are employed in the fishery and seafood processing sector and approximately 30% in agro-industry.

The predominant migrants from Lao PDR tend to work in the agriculture sector, accounting for almost 60% of the total number of Lao nationals in Thailand (Mekong Migration Network, 2005). Others are occupationally engaged as truck drivers, labourers, factory workers, construction workers, sex workers and domestic workers. In Mukdahan and Nong Khai Provinces, where almost all of the migrant workers are from Lao PDR they are employed mainly in trade, entertainment, agricultural and household sectors.

The numbers of migrant workers from the three neighbouring countries registered for work permits in the studied provinces in 2006 are summarized in Appendix A and Table 3.1. With regards to gender, it is noticed that the registered female migrant workers accounted for almost half of the total number in the 10 province studied. In some of the provinces studied such as Tak, Nong Khai and Mukdahan, the numbers of registered female migrant workers recently outweighed the numbers of registered male migrant workers.

Table 3.1 Number of Migrant Population Reported in the 10 Studied Provinces, 2006

Province	Number of Registered Migrant Workers				Top Three Occupations	Other Migrant Groups/ Ethnic Groups Reported
	Myanmar	Lao PDR	Cambodia	Total		
Samut Sakhon	89,402	1,699	450	91,551	1. Fishery 66.3% 2. Unidentified 26.2% 3. Construction 4.4%	None
Chiang Rai	12,787	282	5	13,074	1. Agriculture and livestock (2004-2007) 22.5-33.0% 2. Domestic work (% unknown) 3. Construction (% unknown)	178,287 ethnic populations: - Akha 33.5% - Lahu 27.7% - Hmong 17.1% - Mien 8.5% - Lisu 5.7% - Others 7.5%
Tak	38,416	1	4	38,421	1. Garment factory 39.7% 2. Textile factory 30.0% 3. Agriculture and livestock 16.7%	157,980 ethnic populations: - Karen 69% - Mon 19% - Highland Thai 7.7% - Others 4.3% 73,184 displaced persons from Myanmar residing in the temporary shelters along the border.
Mukdahan	11	833	3	847	Not Available	None
Nong Khai	32	1,344	8	1,384	Not Available	None
Trat	2,800	56	5,572	8,428	1. Fishery 38.3% 2. Agriculture and livestock 32.4% 3. Factory 11.1%	None
Sa Kaeo	Not Available	Not Available	Not Available	2,135	Not Available	None
Prachuap Khiri Khan	7,465	318	277	8,060	1. Agriculture and livestock 31.1% 2. Fishery 27.7% 3. Factory 13.7%	None
Phang Nga	16,683	65	1	16,729	1. Agriculture 71.9% 2. Construction 12.9% 3. Fishery 6.9%	2,659 sea gypsies
Ranong	30,997	76	6	31,079	1. Fishery 51.4% 2. Agriculture 30.0% 3. Domestic work 5.8%	47,735 displaced Thais 412 sea gypsies

Source: 1. Provincial Health Offices except Ranong and Sa Kaeo from Office of Foreign Worker Administration, Department of Employment, Ministry of Labour and Social Welfare
 2. Chiang Rai Hill Tribe Welfare and Development Center, 2008
 3. Tak Hill Tribe Welfare and Development Center, 2008
 4. The Thai-Burma Border Consortium (TBBC), 2008
 5. Chuensinthu, T., 2005
 6. Ukrit A. in www.sru.ac.th/TRF/Documents/0024.pdf on 10 September 2008

With the exception of Samut Sakhon and Trat Provinces, migrant workers from the three neighboring countries are more likely to reside in border provinces proximate to their countries of origin. Since Samut Sakhon Province is one of the most densely industrialised areas and is an important port for fishery business in Thailand which requires a large scale of labour force. This makes Samut Sakhon an ideal place for migrants seeking employment. Migrants from Myanmar were recorded to be the first group of migrants to arrive in the province. Later, many others migrated to Samut Sakhon Province, influenced by their networks (such as having relatives and friends who already live and work in the province) or by recruiting agents or “brokers”.

An example of the structural dynamics of migrant workers is exemplified in Trat Province adjacent to Cambodia. For example, the number of migrant workers from Myanmar in Trat Province increased particularly in the agriculture and fishery sectors, although geographically the province is considerably far from Myanmar border. This is probably because the first few groups that came to Trat were workers in fishing boats, but later found other job opportunities and told their families and peers to join them.

Some of the provinces studied such as Chiang Rai, Tak and Ranong also have marginalised populations other than migrant workers. For instance, Chiang Rai Provincial Office reported that there were 178,287 persons of various ethnic groups, comprising of 12.8% of the total population in Chiang Rai in 2003. The majority of them are Akha ethnic, followed by Lahu, Hmong, Mien, Lisu, Karen, Lawa and Kamu. Other ethnic groups in the province include Tai Lue, Shan and Yunnan Chinese (Chiang Rai Hill Tribe Welfare and Development Center, 2008). It is important to note that a large number of these ethnic groups have not been granted the Thai citizenship despite their length of residence in the area. Their non-status as a Thai citizen or a migrant worker excludes them from the existing Thai National Universal Health Coverage Scheme, CMHI and VMHI.

In Tak, the MOI reported in 2006 that there were 157,980 ethnic populations, of which the largest group is the Karen, followed by Mon and highland Thai (Tak Hill Tribe Welfare and Development Center, 2008). Other ethnic groups such as Lahu, Lisu, Mien and Akha comprise less than 5% of Tak’s ethnic population. With three temporary shelters unofficially named as “camps” for displaced persons (“refugees”) from the internal conflict in Myanmar including Mae La Camp in Tha Song Yang District, Umpiem Mai Camp in Phop Phra District and Nupo Camp in Umphang District, Tak also hosts more than half of the displaced persons from Myanmar residing in nine camps in Thailand. The estimated number of the displaced persons from Myanmar in Tak is about 73,184 persons (TBBC, 2008). The health of these displaced persons is taken care of by several NGOs providing health information, prevention, care and treatment in the camps.

Indigenous communities called sea gypsies (comprising two major groups of Moken and Urak Lawoi), inhabit areas along the coast and islands in the Andaman Sea on the west coast of Thailand in Ranong, Phang Nga, Phuket, Krabi and Satun Provinces. Only the Moken tribe exists in the two studied provinces of Phang Nga and Ranong. According to a survey conducted during 2002-2003, the estimated number of Moken in Phang Nga is 2,659 persons (Ukrit, 2008), and as of 2007, Ranong reported to have a total of 412 Mokens (Ranong PHO, 2007). Similar to the ethnic groups in the north, this non-Thai population does not benefit from the existing government health insurance schemes.

Another marginalised population group in the south is the displaced Thais from Myanmar. These are Thai ethnics who were affected by British and French influences over Southeast Asian countries during the reign of King Rama V¹. At that time, Siam (former name of Thailand) reached an agreement on the Siam-Burma border with

¹ *Reign during 1868-1910*

the Great Britain, which occupied Burma and some territories were lost to Burma, together with some Thai populations who lived there. Some of these populations and their following generations have tried to return to their home towns later but most have still not been granted Thai citizenships and not being covered by any existing government health insurance schemes as the Thai government considers them Myanmarese. They are a densely populated group residing in Ranong province with some also observed in Chumporn (600 persons) and Prachuap Khiri Khan (unknown number) provinces. According to the 1977 survey, the estimated number of displaced Thais from Myanmar is about 47,735 persons. In Ranong, 370 persons live in Suk Samran, 590 in Kapoe, 480 in La-un, 1,350 in Kra Buri and 1,350 in Muang Districts, making a total of 4,140 displaced Thais in the province (Chuensinthu, 2005).

3. STIs/HIV/AIDS Situation

3.1 HIV Sero-prevalence in Migrant Populations

The actual magnitude of HIV infection among the migrant population is unknown as research studies to observe the epidemic of HIV in this population group has been sporadic despite the policy awareness on migrants' vulnerabilities to HIV/AIDS and the subsequent impacts to host communities. There is no national policy requiring local authorities to conduct sentinel surveillance in the migrant population. As a result, some of the provinces studied (i.e., Chiang Rai, Phang Nga, Mukdahan and Nong Khai) have no survey and Sa Kaeo Province begun to implement theirs in 2006.

General Populations

The results from recent sentinel surveillance surveys conducted in provinces that are considered to have a large number of migrant populations had a proportionately large number of HIV infection among the population (Table 3.2). While the pattern of reported HIV prevalence has continually declined among Thai populations over the years, the reported prevalence amongst migrant population is gradually increasing in various provinces with large numbers of migrants including the border areas. It is noticed that in some particular coastal provinces such as Trat, Ranong, and Prachuap Khiri Khan, the migrant population is one to eight times more than the Thais in the observed infection rates. In particular fishermen are claimed to be at higher risk than migrants in other working sectors. Migrant fishermen often live and work in a more risky environment conducive for STIs and HIV infection.

Table 3.2 HIV Sero-prevalence among Thai and Migrant Populations in Studied Provinces, 2004-2006

Province	Thai (%)			Population Groups	Foreign Migrant (%)			Population Groups
	2004	2005	2006		2004	2005	2006	
Trat	5.7	0.0	0.0	Fishermen	2.2	2.2	8.1	Fishermen
Samut Sakhon	0.8	0.0	0.7	Military conscripts	3.0	1.0	1.5	Male and female workers*
Prachuap Khiri Khan	0.0	0.0	0.0	Military conscripts	N/A	1.3	2.0	Male workers*
Ranong	0.0	1.1	0.0	Military conscripts	3.0	4.5	3.5	Fishermen
Tak	N/A	0.9	0.5	Military conscripts	2.8	2.2	1.9	Male workers*
Sa Kaeo	0.7	0.8	1.0	Military conscripts	N/A	N/A	1.0	Workers*

Note: * The HIV sero-prevalence sentinel surveys in most provinces conducted during the medical examination process required for the work permit application and renewal, and therefore the data were very limited. The samples in some target provinces consist of both male and female migrants in various occupations if not specified.

Source: Provincial Health Offices, Sentinel Surveillance Survey Reports

Despite scarce information on the actual numbers of HIV/AIDS reported cases in migrant populations, an official report on HIV symptomatic cases and AIDS patients gathered from the Form 506/1 concluded “labourer” as the category with the highest reported cases. This accounted for more than 80% compared to fishermen who accounted for only 10-15% of the reported cases. It is still unexplained what occupation category “labourer” means except that it is not referring to fishermen. This discrepancy in categories highlights the lack of relevant in-depth information regarding HIV/AIDS and migrant population in existing data sources.

In the past, Thailand as a country has been highly praised for its effort to successfully control an epidemic of HIV/AIDS particularly, in the most-at-risk populations. However, in recent times as the wave of an epidemic alarmingly increases, the pattern of infections has also appeared to be spreading among persons with lower risks. The infections have greatly elevated in women, which accounted for 43% of newly infected cases in 2005 (UNAIDS and WHO, 2007).

Pregnant Women

It is worth noting that most of the provinces targeted in this study have remained at higher rates of transmission in pregnant women than the national average. The presence of HIV infection among pregnant women in migrant population has been observed to be about two to three times higher than those of the Thai population (Table 3.3). Although the Thai government has successfully implemented PMTCT programmes nationwide, where anti-retroviral treatment has been provided to HIV positive pregnant women, this has not been the case for most non-Thai residents. Under the GFATM, the government expanded its PMTCT programme to reach migrant pregnant women in a few piloted provinces such as Samut Sakhon, Trat and Sa Kaeo since 2006. However, challenges in programme implementation were reported due to the frequent mobility of the migrant mothers, loss to follow-up of the clients and language barriers.

Table 3.3 Comparison of HIV Prevalence in Thai and Migrant Pregnant Women in Studied Provinces, 2004-2006

Province	Thai (%)			Migrant (%)		
	2004	2005	2006	2004	2005	2006
Trat	1.8	1.7	1.5	5.4	5.2	4.2
Samut Sakhon	1.0	1.3	0.8	0.7	0.5	0.4
Prachuap Khiri Khan ¹	1.4	1.0	1.0	2.7	2.5	3.2
Ranong	1.1	1.6	1.4	1.3	1.5	2.4
Phang Nga	1.1	1.5	1.1	N/A	N/A	N/A
Tak	1.6	1.2	0.8	2.8	2.9	2.3
Chiang Rai	3.2	1.3	1.3	N/A	N/A	N/A
Sa Kaeo	1.2	0.9	0.8	N/A	3.4	1.5
Nong Khai ²	1.5	0.6	0.9	6.7	0.0	0.0

Note: All provincial data except from Prachuap Khiri Khan and Nong Khai are from Prenatal HIV intervention monitoring system (PHIM) database. The prevalence rates calculated based on women giving births at the public hospitals.

¹ Data gathered from the hospitals' antinetal clinic service.

² National Sentinel Surveillance Survey at Antinetal Clinics

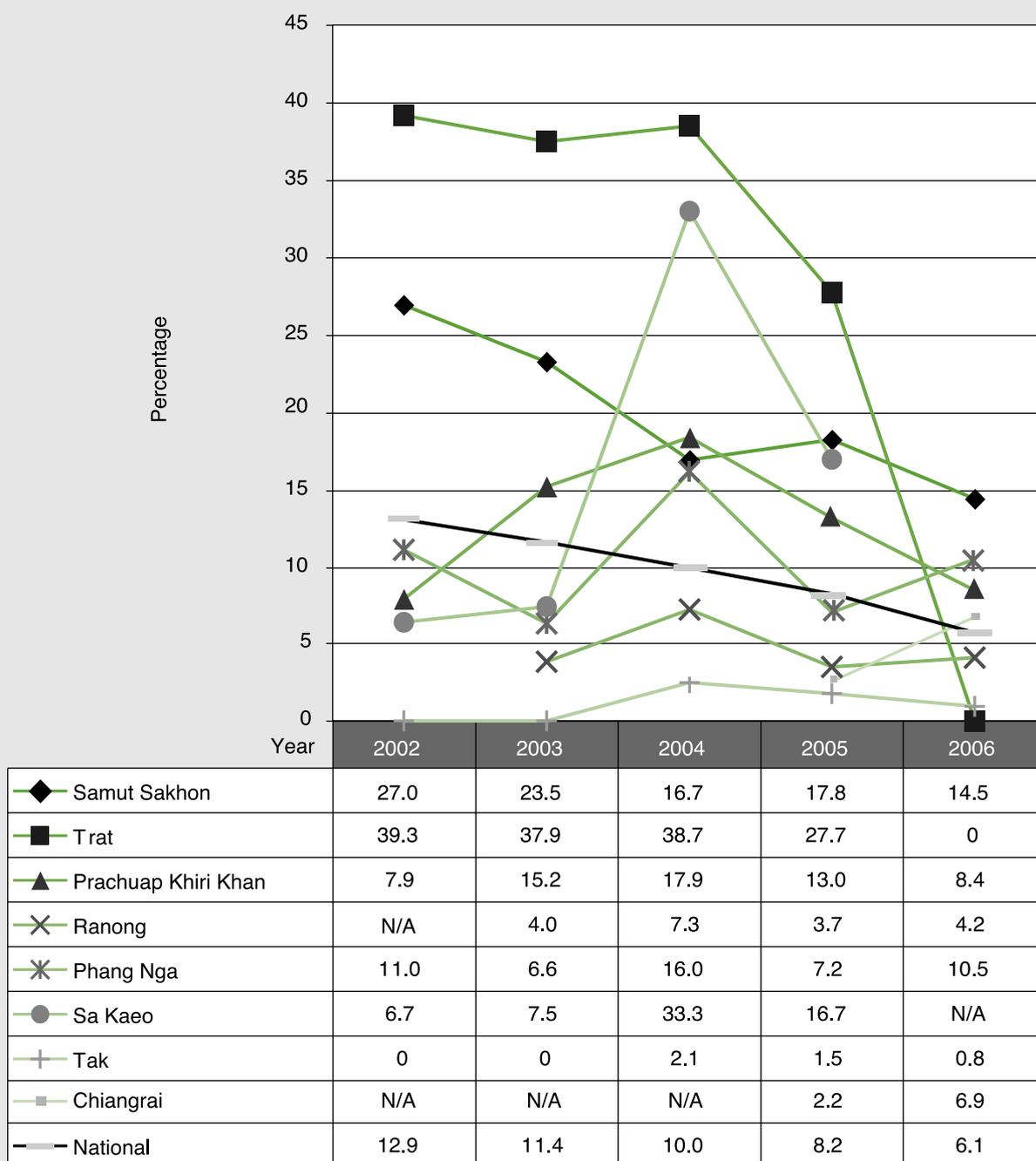
Source: Provincial Health Offices

Sex Workers

The data from the HIV sentinel surveillance in sex workers is not disaggregated into Thai and migrant sex workers in most provinces. This limits the precise analysis on the degree of epidemic among migrant sex workers.

The trends of HIV infection among Thai brothel-based sex workers in the studied provinces have been considerably high in the past five years (Figure 3.1). In 2006 infection rates among Thai brothel-based sex workers varied widely ranging from 0-15%. In many provinces except for Trat the prevalence remained high as compared to the national level in 2006. The infection trends were found to be slowly decreasing in Samut Sakhon, while in Phang Nga and Ranong the trends fluctuated over 2002-2005 before slightly increasing between 2005 and 2006. In Prachuap Khiri Khan, the infection in these sex worker groups continually increased during 2002-2004, but started dropping after 2004 to reach 8.4% in 2006. In Chiang Rai, the rate jumped quickly from 2.2% in 2005 to 6.9% in 2006. In a small border province like Sa Kaeo, the prevalence appears to be alarmingly high as the rate has slowly increased from 6.7% in 2002 and then sharply peaked to a level of 33.3% in 2004 before dropping down to 16.7% in 2005. The infection among Thai brothel-based sex workers in Tak increased slightly in 2004 and plateaued at 0.8% in 2006.

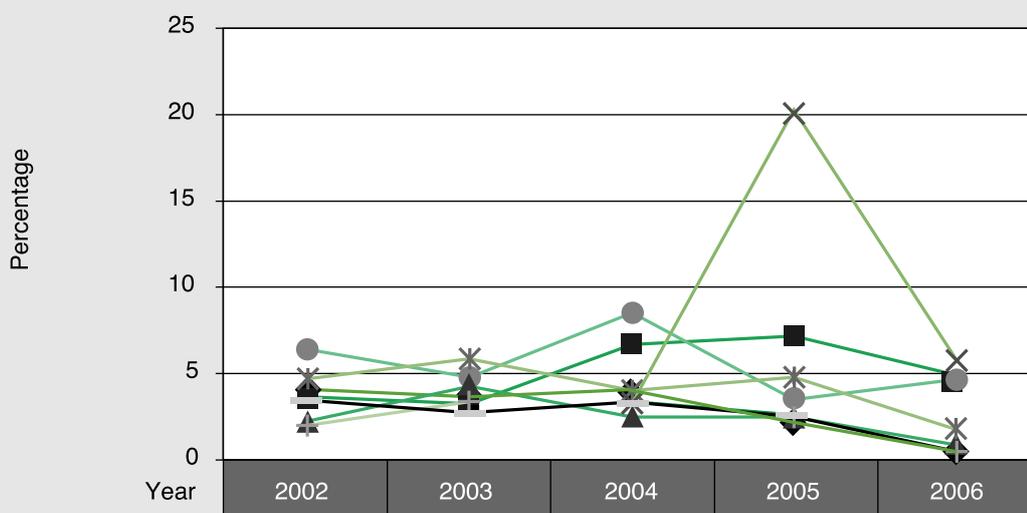
Figure 3.1 HIV Sero-prevalence among Brothel-Based Thai Sex Workers in Selected Studied Provinces, 2002-2006



Source: Provincial Health Offices, Sentinel Surveillance Survey Reports

Despite much lower rates of HIV infection among non brothel-based Thai sex workers compared to brothel-based ones, the infection trends among non brothel-based Thai sex workers have remained constant over the years between 2 and 7%. Exceptions were observed in selected provinces in different years where the prevalence during 2004-2006 was much higher than the national figure. However, Mukdahan, Pang Nga, Trat, and Sa Kaeo are consistently higher in prevalence than other studied provinces as well as the national level (Figure 3.2).

Figure 3.2 HIV Sero-prevalence in Non Brothel-Based Thai Sex Workers in Selected Studied Provinces, 2002-2006

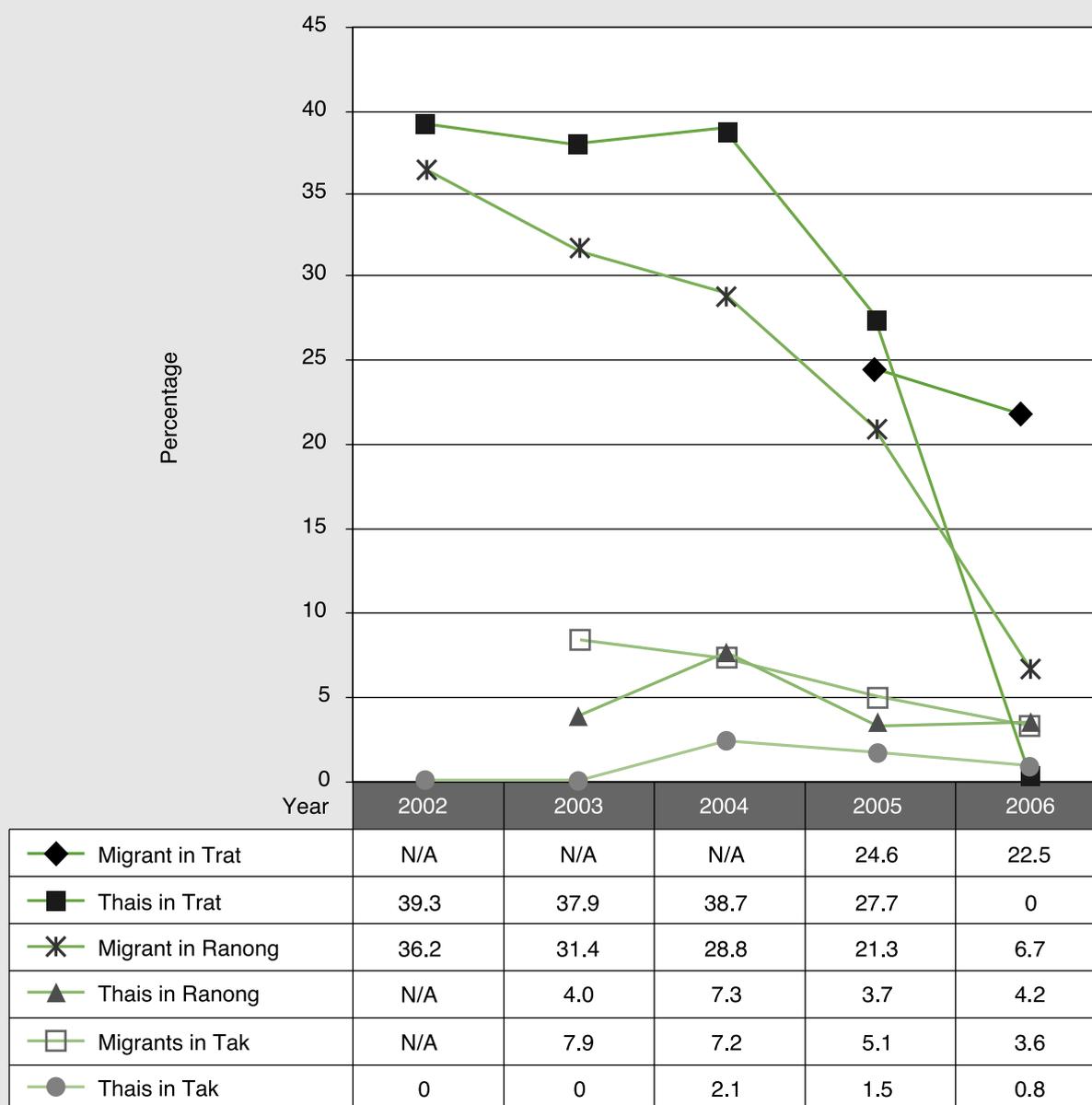


Year	2002	2003	2004	2005	2006
◆ Samut Sakhon	4.8	4.0	4.5	3.1	2.3
■ Trat	4.2	3.9	6.6	7.0	5.2
▲ Prachuap Khiri Khan	3.1	4.7	3.3	3.3	2.0
× Sa Kaeo	N/A	N/A	3.4	20.0	5.9
✱ Phang Nga	5.0	5.9	4.5	5.1	2.7
● Mukdahan	6.4	5.1	8.9	4.1	5.0
+ Chiangrai	2.9	4.2	N/A	3.2	2.2
— National	4.1	3.7	4.0	3.4	N/A

Source: Provincial Health Offices, Sentinel Surveillance Survey Reports

Recently, a few provinces (such as Tak, Trat, Nong Khai and Ranong) have studied the magnitude of HIV infection in foreign female sex workers. As observed in Trat, HIV infection in Cambodian female brothel-based sex workers has slowly decreased from 24.6% to 22.5% between 2005 and 2006. Nevertheless, the rate is still extremely higher than that of their Thai counterparts in 2006. However, the sharp drop of the HIV infection rates among the Thai counterparts from 27.7% in 2005 to 0.0% in 2006 is questionable. In Ranong, infection rates in Thai sex workers have remained at similar levels over the past four years while the rates in Myanmar sex workers continually decreased greatly over the same period but, the infection rate in 2006 was still much greater than that of Thai nationals. In Tak Province, the detection rates have always been much higher among migrant sex workers as compared to their Thai counterparts (Figure 3.3).

Figure 3.3 HIV Sero-prevalence among Brothel-Based Thai and Migrant Sex Workers in Selected Studied Provinces, 2002-2006



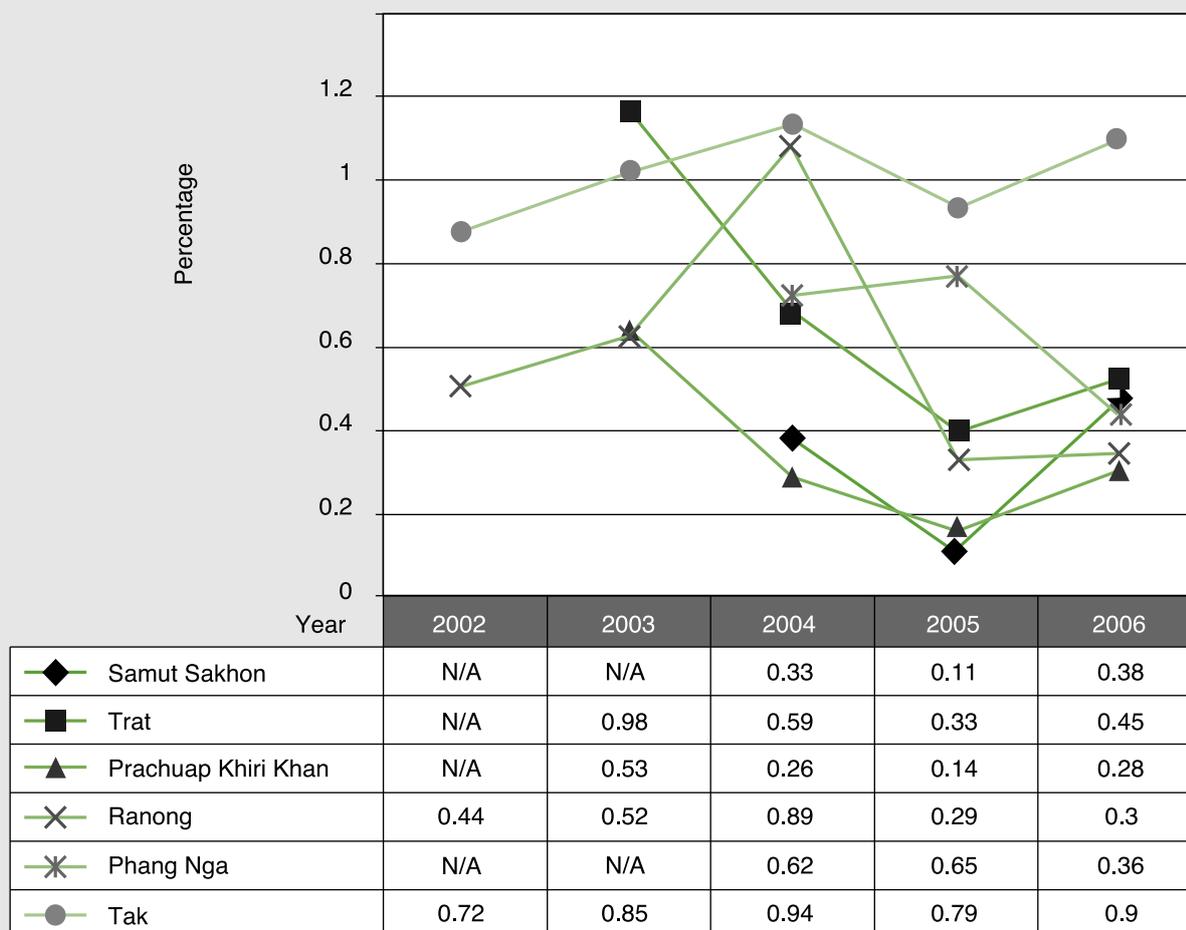
Source: Provincial Health Offices, Sentinel Surveillance Survey Reports

3.2 STIs Situation

One source for investigating the STIs situation in migrant populations is through the data gathered from medical examinations during the process of attaining a migrant work permit. Unfortunately, not all the provinces studied made efficient data collection during the work permit process and the use of the data collected is limited. One of the reasons for the limited collection of data is that hospitals in charge of migrant health examinations are not officially required to collect this data which made accessing such data very limited.

The medical examination results for migrants that applied for work permits in most of the studied provinces suggest that the proportion of migrant workers with syphilis (in treatable stage) was less than 0.5% in 2006 (Figure 3.4). An exception was observed in Tak Province where the rate (0.9%) was two to three times higher than other studied provinces. In all cases, the syphilis infection rates among registered migrant workers were less than 1% at all studied sites in the past half decade.

Figure 3.4 Syphilis Prevalence among Migrant Workers Receiving Medical Examination during Work Permit Application in Selected Studied Provinces, 2002-2006



Source: Provincial Health Offices, Migrant Workers' Medical Examination Records

Some provinces have also tracked STI situations in female sex workers or service workers. For example, Ranong PHO's sentinel surveillance surveys indicated syphilis prevalence rate in Myanmar sex workers as 8.6% in 2003 and it plateaued at a rate of 7 to 8% during 2004-2005 and dropped to 4.9% in 2006. The same survey reported a negligible case for syphilis among Thai sex workers over the same period (Ranong PHO, 2008).

The STI situation among female sex workers in Samut Sakhon indicates an opposite picture in that the prevalence rate of syphilis in Thai sex workers slightly increased from 0.5% in 2004 to 0.7% in 2006, but the rate in Myanmar sex workers dropped dramatically to a rate of zero in 2006 from 8.0% in 2004 (Samut Sakhon PHO, 2008).

The study on STIs among Lao sex workers along the border areas of Thailand is insufficient. A research conducted in Mukdahan Province by the Seventh Regional Office of Disease Prevention and Control in 2004 indicated that STIs among this marginalized group is relatively high (Mukdahan PHO). The prevalence rates of gonorrhoea and non-gonorrhoea (non-gonococcal urethritis) in Thai female sex workers was 7% and 19% respectively, while the rates of those in Lao sex workers were higher at 12% and 27% respectively. Mukdahan PHO reported that gonorrhoea and non-gonorrhoea rates among all female sex workers who came for STIs treatment in the mobile health services implemented by the PHO and Mukdahan Hospital in 2006 were 2.8% and 4.6% respectively. Despite the mixture of ethnicities of the clients at the mobile clinics, Lao nationals were the majority group. In contrast, a behavioural study found that the percentage of Thai sex workers who reported having signs and symptoms of STIs was significantly greater than the Lao nationals, with 10.1% against 6.5% (Mukdahan PHO, 2006).

3.3 Sexual Risks and Condom Use

The observed high levels of syphilis and HIV/AIDS found in migrant populations in many provinces reflect a high activity of unsafe sex. Syphilis was shown to be highest in the men of the migrant population. Many studies revealed that male migrants often visited sex workers.

STIs/HIV related behavioural study among migrant populations is very limited. A widely recognized survey is from the Prevention of HIV/AIDS among Migrant Workers in Thailand (PHAMIT) Project baseline study in 2004.² With permission from the publishers (Raks Thai Foundation and the Institute of Population and Social Research (IPSR) of Mahidol University) to re-analyze the raw data of PHAMIT baseline survey by disaggregating the data for each of the PHAMIT's targeted province that overlapped with this study; namely Trat, Phang Nga, Samut Sakhon, Prachuap Khiri Khan, Ranong and Tak. The respondents of PHAMIT baseline study were Cambodian migrants in Trat Province (sample size was 154) and Myanmar migrants residing in the other provinces (with sample sizes of 192 in Phang Nga, 405 in Samut Sakhon, 192 in Prachuap Khiri Khan, 310 in Ranong and 360 in Tak). Given the sampling design of PHAMIT, the assessment was statistically representative of three nationalities (Myanmar, Cambodian and Laotian) and three occupations which migrants worked in that is, marine fisheries, fishery-related work and factory work. It should be noted that this re-analysis may have had an impact on the representativeness of samples for each target province.

The data reanalysis revealed that among the respondents who stated they had sex, the percentage of sex with sex workers in the past one year ranged from 60.2% in Trat, 31.9% in Phang Nga, 17.3% in Samut Sakhon, 16.4% in Prachuap Khiri Khan, 13.5% in Ranong and 5.1% in Tak Provinces respectively. This data suggests migrant men who live in the port provinces are more likely to engage in sex with sex workers.

Migrant sex workers are observed to predominantly along border towns of Thailand in Mae Sot in the north-western province of Tak, Mae Sai in the northern province of Chiang Rai, Muang Nong Khai in the north-eastern province of Nong Khai, and Khlong Yai and Aranyaprathet in the eastern provinces of Trat and Sa Kaeo. Lao sex workers are approximately one-third of sex workers in Mukdahan Province according to a recent survey conducted by Mukdahan PHO. In some port communities like Samut Sakhon and Trat Provinces where a large number of migrant men live it is common to find migrant sex workers.

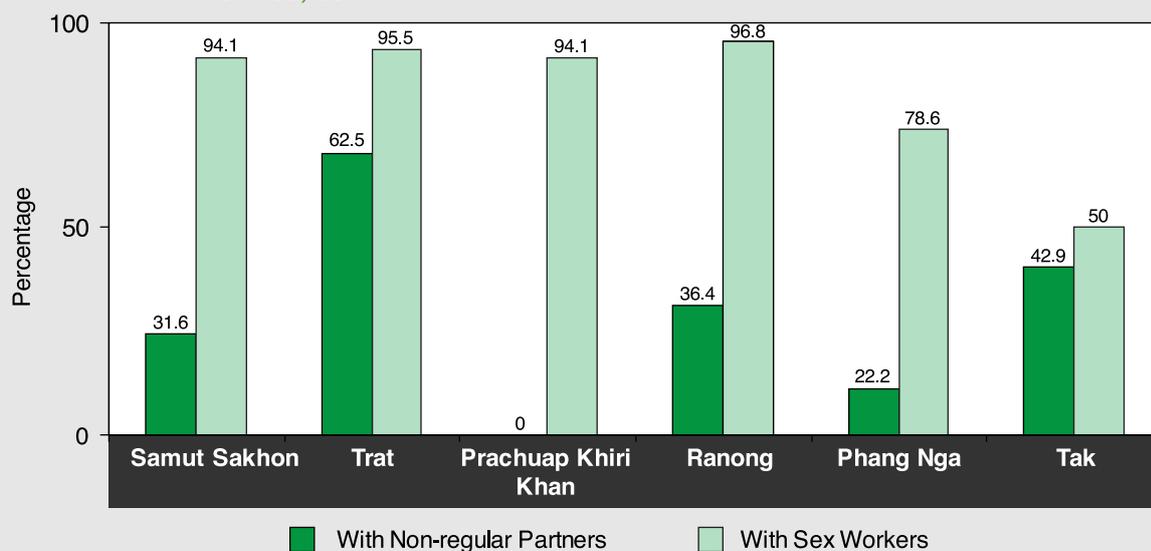
² At the time of this study, the Project follow-up survey report was not yet available.

The majority of non brothel-based migrant sex workers are likely to be employed in entertainment places such as karaoke bars (Press, 2004; Nong Khai PHO, 2006; Mukdahan PHO, 2006). The predominant clients of migrant sex workers at inland border towns like Mae Sot, Aranyaprathet and Muang Mukdahan are Thai clients (Press, 2004; Mukdahan PHO, 2006).

PHAMIT also cited most migrant men like to engage with sex workers of the same nationalities, with exceptions in Samut Sakhon, Phang Nga, Prachuap Khiri Khan and Tak where the migrant men stated they engaged with Thai sex workers in the past one year. The assessment by PHAMIT also revealed an interesting result regarding a small number of Myanmar migrant workers in Samut Sakhon. The Myanmar migrants reported in engaging with sex workers from Vietnam and Cambodia, while a few Cambodian migrants in Trat had sex with Vietnamese and Myanmar sex workers. It is not clear in the answers given by respondents if they engaged in sex with Myanmar, Cambodian and/or Vietnamese sex workers or not. A possible explanation maybe the migrants are fishermen who often moved to various ports during the year as part of their vocation. Another explanation is that Vietnamese sex workers are prominent in Samut Sakhon and Myanmar sex workers are prominent in Trat. There is no report of Lao sex workers in the entertainment areas along the seaports; however, they might be present there but the migrant men are not able to distinguish them from the Thais because of similarities in language and physical characteristics.

A survey done by IPSR in 2004 showed that condom utilization for sexually active migrant populations is generally low. The level of consistent condom use is found to vary among migrant workers in the provinces studied. A re-analysis of the PHAMIT results showed that the percentage of condom use with sex workers ranged from 50% to 96.8% (Figure 3.5). However, the consistency in condom use with non-regular partners was significantly lower, from none in Prachuap Khiri Khan Province to 62.5% in Trat Province. It is worth noting the high rate of condom use by migrants who had sex with sex workers (95.5%) and those who had sex with non-regular partners (62.5%) among Cambodian male migrants in Trat, as compared to Myanmar male migrants in the rest of the studied provinces who had inconsistent condom use rates with sex workers (50.0-96.5%) and non-regular partners (0-42.9%).

Figure 3.5 Condom Use in Last Sex among Male Migrant Workers in Selected Studied Province, 2004



Note: The samples in Trat were Cambodian migrant workers whereas other provinces' samples were migrant workers from Myanmar.

Source: IPSR. PHAMIT Baseline Survey, 2004

The most recent findings on unsafe sexual behaviours of Cambodian migrants is of concern. In a behavioural survey conducted by the Sa Kaeo PHO in early 2007 among 305 Cambodian migrant workers deported through the Immigration Check Point in Sa Kaeo Province it showed that almost three in every four respondents claimed that when they had sex in Thailand they had never used condoms. For those who had paid sex in Thailand more than one-third had never used condom with their sexual partners (Sa Kaeo PHO, 2007).

Regarding Lao migrants, there is little research to learn about their sexual and risk-taking behaviours, vulnerabilities to STIs and HIV infection. This is due perhaps to the small proportion of Lao migrants in the Thai labour force. Also, Lao migrants are well integrated into the Thai society so conducting a survey is a challenge. It is often stated that Lao communities in Thailand are more populated in provinces which are proximate to their home country such as Nong Khai and Mukdahan to name a couple. Among the few studies conducted it was reported that condom use among male migrants from Lao PDR is low. A survey conducted by Nong Khai PHO in 2006 indicates that about 17% of Lao male migrants have their sexual debut with sex workers and 30% of those who had sex used condoms. Approximately one-third claimed they used condoms in their last sex. For those who engaged in transactional sex in the past six months, 71% claimed they always used condoms. To compare condom use among Thai and Lao male workers in Nong Khai, the behavioural survey in 2006 showed that Thai men were more likely to use condoms in their sexual debut than the Lao men (27.9% and 15.2% respectively).

Condom stigma is still persistent in Southeast Asian cultures and most people only use them when having casual sex or when having sex with sex workers. It is perceived that using condoms out of this context means a lack of trust in a couple. The type of intimacy expressed by migrant workers in a relationship is that it is connected to their decision to use condoms. In this case intimate relationship refers to a more steady partnership hence why condom use in intimate relationships is relatively low as compared to when accessing sex workers (PHAMIT, 2004; Press, 2004; Chiang Rai PHO, 2006; IOM, 2005; IOM 2006). It is reported that migrant men rarely used condoms with non brothel-based sex workers (Press, 2004), which could be linked to their perception of the characteristics and nature of non brothel-based sex workers. Non brothel-based sex workers are perceived by migrant men to be the same as service workers in karaoke bars or restaurants – the common entertainment places the migrant men usually go for their leisure. Also, many of the service women do not consider themselves as sex workers. In many cases the intimacy between service women and clients are developed as “sweethearts”, and some couples advance to long-term relationships or even marriage. Such perceptions and conditions often lead to both parties apprehension in using condoms for safe sex practice.

Various behavioural surveys conducted by the PHOs in Mukdahan, Chiang Rai and Nong Khai, reported sex workers both Thais and migrants but particularly Thai sex workers as being aware of their risks to HIV infection. The proportion of condom use by Thai sex workers with non-regular customers was at a high level (above 92%). Condom use during last sex amongst sex workers in 2004 and 2006 is tabulated in Figure 3.6 and it indicates that the proportion of condom use in coastal provinces increased or remained stable but at high rates. However, in land border provinces such as Chiang Rai and Mukdahan there were a declining rate of condom use by sex workers during 2005 to 2006.

Figure 3.6 Condom Use in Last Sex among Sex Workers in Selected Studied Provinces, 2004-2006



Year	2004	2005	2006
◆ Samut Sakhon	99.3	99.1	99.1
■ Prachuap Khiri Khan	N/A	92.1	94.5
▲ Mukdahan	94.0	95.0	93.0
× Chiang Rai	77.0	95.3	83.3

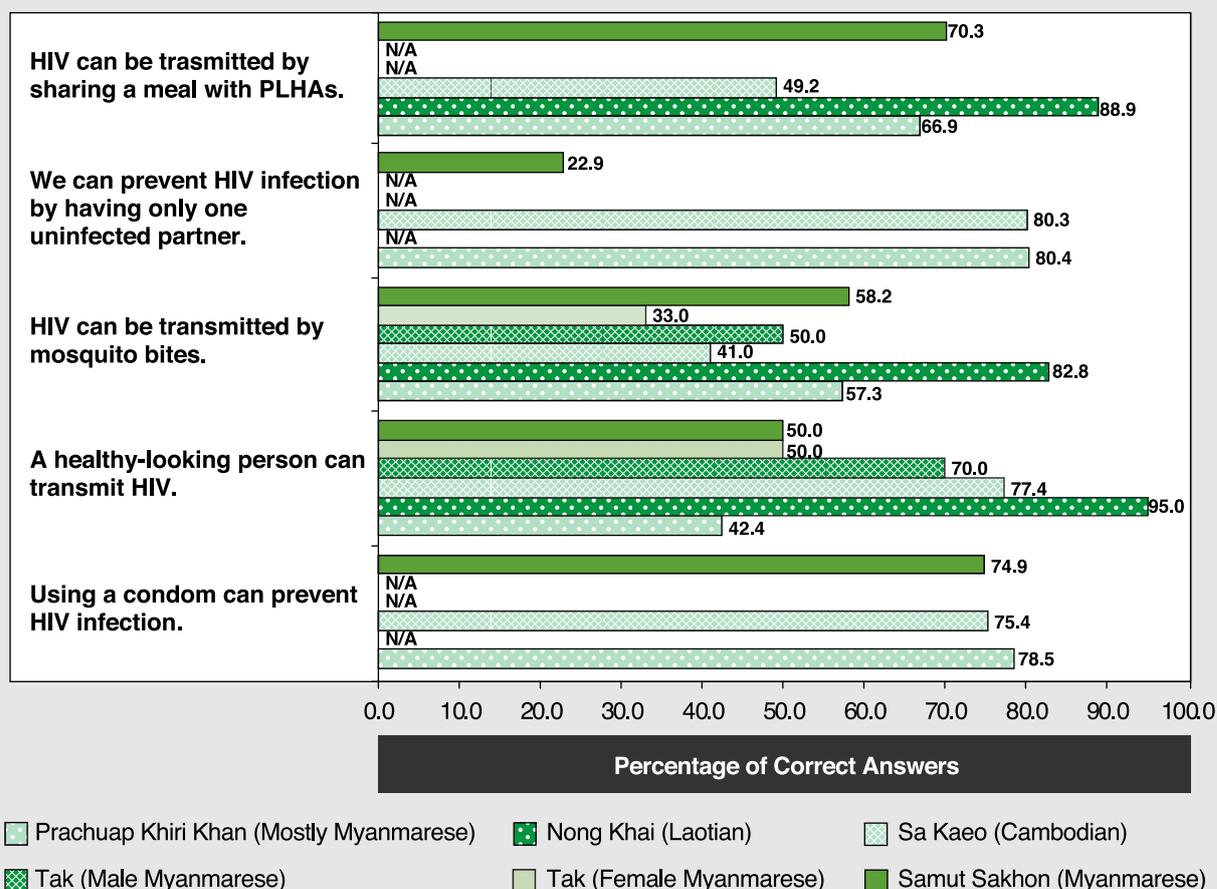
Source: Provincial Health Offices, Behavioural Surveillance Survey Reports

3.4 Migrants’ Knowledge and Perceptions on HIV/AIDS

General knowledge of HIV/AIDS among migrant populations is moderate according to the most recent surveys conducted at various provinces with various migrant groups (Figure 3.7). According to gender migrant women regardless of nationality were noticed to have relatively lower knowledge and higher misconceptions than migrant men (Mullany, 2003; Theede, 2006; IPSR, 2004). For example, research conducted in Mae Sot in 2003 with migrant factory workers revealed that female workers knew less about HIV/AIDS than male workers, and only 15% of female workers as compared to 60% of male workers had ever seen a condom (Mullany, 2003). The study by PHAMIT in 2004 also showed that female migrants reported less than male migrants in seeing a condom.

When comparing nationalities, the three different surveys undertaken during 2006 suggests Lao migrant workers were likely to have better knowledge on HIV than their counterparts; Myanmar and Cambodian workers as displayed in Figure 3.7.

Figure 3.7 HIV/AIDS Knowledge among Migrant Population in Selected Studied Provinces, 2006



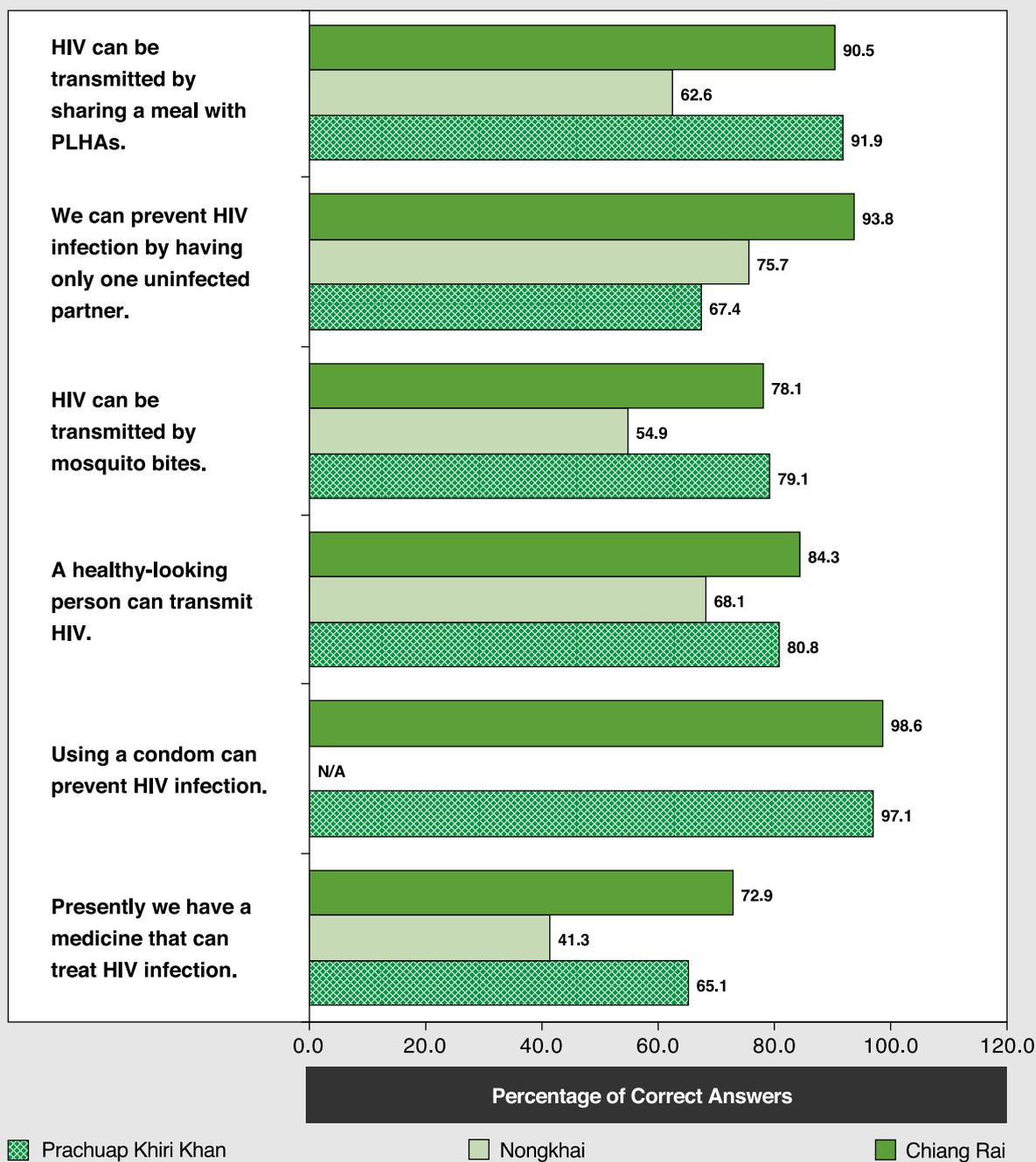
Note: Data based on BSS studies by relevant Provincial Health Offices except Tak data from IOM's 2006 study in Myanmar migrant workers in Mae Sot District and Sa Kaeo data from a survey of deported Cambodian migrant workers.

- Source:
1. Provincial Health Offices. 2006 Behavioural Surveillance Survey Reports
 2. IOM. Assessment of Mobility and HIV Vulnerability among Myanmar Migrant Sex Workers and Factory Workers in Mae Sot District, Tak Province, Thailand, 2007
 3. Sa Kaeo Provincial Health Office. A Study of Influencing Factors on HIV/AIDS Prevention in Foreign Migrant Workers who were Deported at Baan Khlong Luek Check Point, Aranyaprathet District of Sa Kaeo Province. 2007 (Internal Report)

In the assessment that PHAMIT conducted, it was revealed that the level of HIV/AIDS knowledge and perception among Cambodian migrants was higher than their Myanmar counterparts. A recent study by Trat PHO about migrant workers who underwent medical examination during the work permit application process also shows similar finding. There has been a tremendous effort made in Cambodia on their national HIV/AIDS campaign and according to PHAMIT analysis migrants from Cambodia stay in Thailand shorter than migrants from Myanmar which, suggests they have better knowledge as a result from their exposure to HIV/AIDS information in their home country, rather than while living and/or working in Thailand.

Similar to the general migrant workers, HIV/AIDS knowledge among migrant sex workers particularly those from Lao PDR were generally fair. However, their level of knowledge was much lower than their Thai counterparts (Figure 3.8).

Figure 3.8 HIV/AIDS Knowledge among Thai and Laos Brothel-Based Sex Workers in Selected Studied Provinces, 2006 and 2007



Note: The surveys in Chiang Rai and Prachuap Khiri Khan Provinces conducted in Thai sex workers in 2006. Nongkhai Province survey conducted in Lao sex workers in 2007.

Source: Provincial Health Offices, 2006 and 2007 Behavioural Surveillance Survey Reports

A number of research studies concluded that the majority of migrants regardless of their nationalities had limited knowledge on mother-to-child transmission and antiretroviral treatment (ART). They were more likely to believe that a woman with HIV could not transmit the virus to her newborns through breastfeeding (Theede, 2006; Jian, 2004; IPSR, 2004).

Most migrant factory workers in provinces such as Tak and Samut Sakhon are limited in accessing HIV/AIDS information due to their work conditions (Nopachai, 2004) because of the limited free time and freedom to move beyond the factory compound. This lack of freedom and limited access to information is related to the inadequate knowledge on HIV/AIDS in this group despite a high proportion of them in the surveys reporting they have heard about HIV/AIDS (Mullany, 2003).

There are a high number of vulnerable groups who have very limited knowledge on HIV/AIDS infection such as, displaced Thai populations, Sea Gypsies in Ranong Province, ethnic highland populations in Tak and Chiang Rai Provinces, displaced persons (aka “refugees”) from Myanmar residing in Tak and other Provinces along the border. Between 2005 and 2006, IOM conducted two consecutive surveys in Chiang Rai: one with the ethnic highland population and another with migrant workers. The study results imply that in general migrant workers had better knowledge on HIV/AIDS than the ethnic groups. For example, nine in every 10 migrant workers compared to only half of the ethnic populations answered correctly about the following statement: “you can prevent HIV infection by not using public toilets”. About 63% of the ethnic populations did not know that they could not get infected with HIV by touching AIDS patients while only 23% of migrant workers answered this incorrectly. From the survey it showed that the ethnic groups were more likely than the migrant workers to discriminate people living with HIV and AIDS (PLHA). The survey indicated that 43% of ethnic groups versus 87% of migrant workers answered that PLHA can stay in their communities.

A survey conducted by the United Nations High Commissioner for Refugees (UNHCR) in the nine refugee camps hosting displaced persons from Myanmar in Thailand suggests that a low prevalence of HIV/AIDS persists with only 63 positive persons reported out of some 150,000 refugees (Burton, 2005). Nevertheless, organisations working with refugees need to focus on HIV/AIDS education to maintain the low level of infection among this group. The same survey reported that many challenges are faced during condom campaigns and distribution in the camps because of strong opposition from community leaders who perceive it as promoting out-of-marriage sex.

The main sources of information on HIV/AIDS in migrant populations were friends and social network for most nationalities except Lao nationals (Theede, 2006; Thu, 2003). For the Lao migrant workers as well as sex workers, the primary information source was television and radio (Nong Khai PHO, 2006).

3.5 Vulnerabilities to STIs/HIV/AIDS

In the past young migrant men have predominantly migrated to Thailand but more recently there has also been an increased number of women migrating too. Most of the men are married but they migrate independently however, within a short period of time they are followed by their families. Contrary to this, some of the migrants start new families in Thailand. Migrant women sometimes migrate because they were trafficked and smuggled. In addition to low payment jobs, these vulnerable women often end up in sex work around port and inland borders such as Trat, Tak, Nong Khai, Chiang Rai, and Ranong.

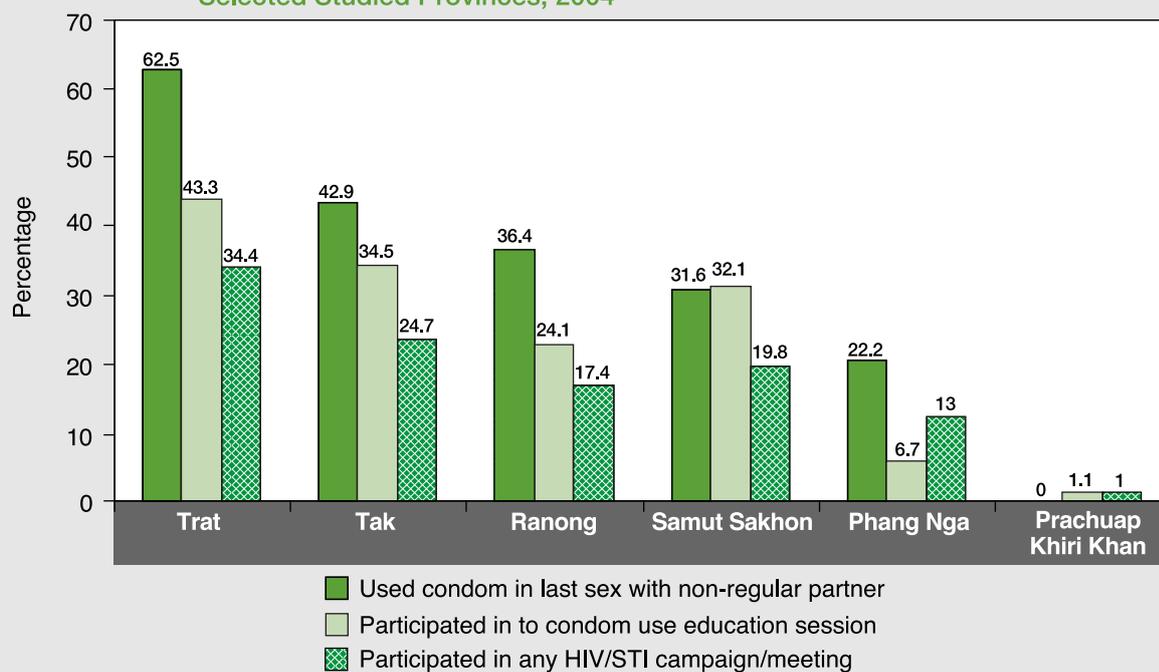
Sexual behaviours and risk prevention awareness are major factors affecting STIs/HIV/AIDS vulnerabilities. Migrant workers in coastal areas, in general, are more likely to visit sex workers than migrant workers in land border provinces such as Tak. It is noticed that the migrant workers from Cambodia are less likely to have families present, while about one third to half of the migrant workers from Myanmar have wives and children with them (Press, 2004). The nature of migrant workers at coastal areas is those working in the fishing and related sectors. The seafarers sail to various ports, confining themselves in the areas around the fishing piers, which do not offer much for leisure activities other than entertainment in the places such as karaoke bars, drinking shops and brothels.

Many fishermen are reported to use intravenous drugs, manipulate and enlarge their penises and tattoo their bodies (Rungkhuresathien and Champaklaj, 2006; Ohnmar, 2000; World Vision Foundation of Thailand (WVFT), 2003). These practices often expose them to HIV infection because of the high risk involved when sharing equipments for injecting drugs and blood contamination during tattooing from cuts and punctures on their bodies. Also, the act of manipulating and enlarging the penis can cause tearing and even irritation on their partners' sexual organ. If anal sex is practiced this can put both sexual partners at higher risk of contracting STIs and HIV.

There is limited research done on other vulnerable groups who are at risk of STIs/HIV such as, other occupational sectors (e.g., migrant agriculturists, construction workers, small factory workers, etc.) and geographical areas (e.g., Prachuap Khiri Khan, Phang Nga, Nong Khai, Mukdahan, Sa Kaeo, etc.). The environment in which migrant factory workers live and work is unlikely to contribute to their vulnerability to STIs/HIV because most of them have limited amount of free time, have restricted movement outside of the factory compounds and often maintain conservative social values. This environment creates limited opportunities for migrant workers to receive adequate information and prevention campaigns on STIs/HIV/AIDS. A study done in 2003 suggested that migrants working in fishing related factories in Mahachai Town in Muang District of Samut Sakhon Province engaged frequently in sex with sex workers (Thu, 2003).

In relation to HIV/AIDS prevention programmes Cambodian migrants were more engaged in the activities than the Myanmar migrants. PHAMIT baseline survey findings also show a higher percentage of Myanmar migrants reporting to know someone with HIV/AIDS than Cambodian migrants (IPSR, 2004). Unfortunately, the PHAMIT survey design does not allow for direct comparison or cross-tabulation of the exposed and non-exposed cases with their behaviour outcomes. However, further analysis of the PHAMIT dataset for this study (Figure 3.9) suggests the importance of adequate knowledge and information of STIs/HIV/AIDS for migrant populations. The data in various provinces indicates that migrant workers who exposed to STIs/HIV programs were likely to adopt the preventive methods.

Figure 3.9 Survey Results of HIV/AIDS Prevention Intervention among Migrant Workers in Selected Studied Provinces, 2004



Source: IPSR, PHAMIT Baseline Survey, 2004

The majority of migrant workers from Lao PDR residing in Thailand are employed in the agricultural sector. There is no research on the status of the HIV epidemic and vulnerabilities in this sector. Lao migrant workers in Nong Khai stated they learned about HIV/AIDS from the Thai media such as television, radio and newspaper (Nong Khai PHO, 2006). This might be as a result of the cultural and language similarity between Thai and Lao nationals which, allows them to utilize the Thai media much more effectively than their counterparts from Cambodia and Myanmar.

The challenge of accessing health care and related services contributes to migrants' vulnerabilities to STIs and HIV infection. Major constraints to accessing health services include the following: inability to pay for the service; lack of available services in immediate needs, migrants with an undocumented status are hindered from freedom of movement and fears of being arrested by the police; language barriers to communicate with healthcare providers, especially among Cambodian and Myanmar migrants; and inconvenience to visit the health facility due to limited opening hours and/or location. Due to the government's current health reform policy and organisational re-structure, the government STI clinics in most provinces have been closed down. The closure of the STI clinics have impacted on the budget and resources to maintain STIs prevention programme among sex workers which, was a priority group for STIs prevention and treatment services.

3.6 Responses to HIV/AIDS in Migrant Population

The data analysis in this section is mainly based on interviews with key informants mostly from NGOs, regarding their HIV/AIDS programmes in the provinces of this study. Despite the fact that data gathered for the analysis are very limited, this section provides a broad picture of programmatic responses to HIV/AIDS in migrant population in the provinces studied.

Migrant Groups Recently Reached

The observations made of PHO's responses to HIV/AIDS in migrant population are varied. Provinces such as Tak, Ranong and Trat, where HIV/AIDS activities for migrants have been extensively implemented have carried out broader activities. However in provinces such as Mukdahan, Sa Kaeo, Prachuap Khiri Kan and Nong Khai HIV/AIDS activities for migrants have just recently started. It should be noted that the progress of HIV/AIDS programmes targeting migrants is strongly attributed to NGOs' strong roles and efforts in the specific provinces.

Migrant workers particularly those who are employed in fishing and seafood processing industries, canned fruit factory, rice mill and saw mill industries and garment factories are mostly benefit from the HIV/AIDS and other health-related programmes in some of the port provinces in this study (Table 3.4). Sex workers are also targeted in many ports and border provinces especially in Nong Khai, Sa Kaeo and Mukdahan. Migrant sex workers are the target group that PHOs currently focus and prioritise their HIV/AIDS program activities.

Marginalised migrant populations working in the agriculture and construction sectors are still largely unreached with HIV/AIDS program activities. Presently, there is little research or knowledge on HIV situation among these sub-populations. Migrant labourers in the agriculture and livestock sectors make up a large group in provinces such as Trat, Phang Nga and Prachuap Khiri Khan. Migrant workers in the agricultural and livestock sectors often live and work in isolated farms and plantations and are often perceived as a low risk group to HIV/AIDS infection. Among the 10 studied provinces, only Phang Nga has an NGO working with Myanmar labourers in rubber plantations and construction sites.

Table 3.4 HIV/AIDS Programme Implementation Sites and Targeted Migrant Groups in the Studied Provinces, 2007

Province	Target Migrant Groups	Target Districts	Programme Implementers
Phang Nga	<ul style="list-style-type: none"> ■ Fishing and seafood processing workers ■ Construction workers ■ Sex workers ■ Agricultural labourers 	<ul style="list-style-type: none"> ■ Takoa Pa ■ Takoa Thung ■ Thai Muang ■ Khura Buri 	<ul style="list-style-type: none"> ■ Government ■ NGO
Ranong	<ul style="list-style-type: none"> ■ Fishermen ■ Seafood processing ■ Sex workers 	<ul style="list-style-type: none"> ■ Muang ■ Kapoe ■ Suk Samran 	<ul style="list-style-type: none"> ■ Government ■ NGO
Prachuap Khiri Khan	<ul style="list-style-type: none"> ■ Fishermen ■ Sex worker 	<ul style="list-style-type: none"> ■ Muang ■ Pranburi 	<ul style="list-style-type: none"> ■ Government ■ NGO
Trat	<ul style="list-style-type: none"> ■ Fishermen 	<ul style="list-style-type: none"> ■ Klong Yai ■ Muang 	<ul style="list-style-type: none"> ■ Government ■ NGO
Samut Sakhon	<ul style="list-style-type: none"> ■ Factory workers ■ Fishermen and seafood processing ■ Sex workers 	<ul style="list-style-type: none"> ■ Muang 	<ul style="list-style-type: none"> ■ Government ■ NGO
Tak	<ul style="list-style-type: none"> ■ Factory workers 	<ul style="list-style-type: none"> ■ Mae Sot 	<ul style="list-style-type: none"> ■ Government ■ NGO
Chiang Rai	<ul style="list-style-type: none"> ■ Sex workers ■ Labourers ■ Ethnic minorities 	<ul style="list-style-type: none"> ■ Mae Sai ■ Chiang Saen ■ Chiang Khong 	<ul style="list-style-type: none"> ■ Government ■ NGO
Nong Khai	<ul style="list-style-type: none"> ■ Truck drivers ■ Sex workers 	<ul style="list-style-type: none"> ■ Muang ■ Phon Pisai ■ Tha Bo ■ Sri Chiangmai ■ Rattanawapi ■ Sangkhom 	<ul style="list-style-type: none"> ■ Government ■ NGO
Mukdahan	<ul style="list-style-type: none"> ■ Sex workers 	<ul style="list-style-type: none"> ■ Muang 	<ul style="list-style-type: none"> ■ Government
Sa Kaeo	<ul style="list-style-type: none"> ■ Sex workers 	<ul style="list-style-type: none"> ■ Aranyaprathet 	<ul style="list-style-type: none"> ■ Government

Source: Provincial Health Offices, PHAMIT, MSF

Prevention Programme

Current HIV/AIDS programmes for migrant populations are not diverse and the most prominent type of programmes implemented are outreach activities such as, behaviour change communication (BCC) using peer educators who often do condom promotion and education. According to interviews conducted with key informants and programme implementers in selected geographic sites, condom promotion had been quite successful considering the large volumes of condoms that were distributed. However, there was insufficient monitoring and evaluation conducted making it challenging to demonstrate the achievements and impacts of the activities implemented in these provinces.

Some provinces have recently started to implement HIV prevention programmes for migrant workers. For example, in Phang Nga, NGOs that originally established their relief and recovery programmes during the post-tsunami period in 2005-2006, have still maintained their presence and expanded their activities to include HIV/AIDS despite that the physical and environmental impacts of the disaster now mostly recovered.

In Nong Khai, STI programmes including HIV/AIDS targeting migrant communities is still limited because the number of migrant workers in the province is small. However, the evidence of HIV sero-prevalence in sex workers in Nong Khai suggests the need for immediate action to tackle the epidemic. Just recently, the PHO and NGOs became more interested in Lao migrant workers and their vulnerabilities to STIs and HIV infection, especially those engaging in sex work along the border. There is also an NGO currently providing prevention activities to Lao truck drivers at the friendship bridge that connects the Muang Nong Khai, and the capital city of Lao PDR.

Despite vigorous programmatic responses in HIV prevention for migrant workers, data analysis results from four provinces (Trat, Tak, Ranong and Phang Nga) suggests that outreach BCC programmes are still challenging to implement. This is because the proportion of migrant population reached by the outreach activities conducted by both government and NGOs are insufficient with less than 20% of the migrant population recently being covered.

The analysis shown in Table 3.5 focuses on major components of HIV/AIDS programmes implemented by PHOs and NGOs in migrant communities. The following are some of the activities implemented: outreach and BCC activities; HIV/STIs counseling and treatment including OIs treatment and case referral to appropriate services; PMTCT and antenatal care for pregnant women; ART programme for PLHAs; home visits to PLHA; psychosocial support for migrants and people affected by HIV/AIDS including support provided to children and families; temporary shelter for HIV/AIDS patients; education programme and training with livelihood options; condom promotion; establishment of migrant PLHA self-help groups; development and training of migrant health volunteers and workers.

Table 3.5 HIV/AIDS Programme Reach to Migrant Population in Selected Migrant Populated Districts of Four Studied Provinces (Only Phang Nga, Ranong, Tak and Trat), 2006

Category	Number / Quantity
Number of Registered Migrant Workers	60,245
Estimated Number of Migrant Population	205,284
Number of Migrants reached through Outreach for BCC	44,933
Number of Migrants Received HIV Counseling and STIs Treatment	2,572
Number of Migrants Received PMTCT Services	485
Number of Migrants Received ART	79
Number of Migrants Received Home Visit Services	336
Number of Migrants Received Psychosocial Support	3,112
Number of Migrants Participated in PLHA Self-help Group	195
Number of Migrant Health Volunteers	1,279
Number of Condom Distributed (pieces)	378,812

Note: - The numbers represented are the sum of the numbers which was reported by interviewed organisations. The accuracies may be limited due to the recall bias and available records/reports from each interviewed organisation.
 - Specific districts for the analysis: Takao Pa, Takao Thung and Thai Muang Districts in Phang Nga Province; Kapoe, Suk Samran and Muang Districts of Ranong Province; Mae Sot District of Tak Province; Khlong Yai and Muang District of Trat Province.

Source: Phang Nga Provincial Health Office, Tak Provincial Health Office, MAP Foundation, WVFT, Camillo Foundation, Medicins Sans Frontieres (MSF), the Foundation of Education and Development and Mae Tao Clinic

STIs/HIV Treatment and Care

One of the major weaknesses in the implementation of HIV programmes for migrant populations is the disconnection from other health services related to HIV prevention and care programmes. Treatment, care and support for migrants living with HIV/AIDS are the least frequent type of programmes being implemented due to limited services available and the difficulty migrants have to access them.

STIs/HIV/AIDS treatment and other healthcare programme for migrant population depends on available public health facilities which is limited in their capacity to support migrant communities. There are a few NGOs who have set up clinics to provide general healthcare and treatments for migrants. These clinics employ trained physicians who are also migrants – WVFT in Ranong Province, Mae Tao Clinic in Tak Province and Raks Thai Foundation (RTF) in Samut Sakhon Province are a few examples of NGOs establishing clinics. However, the statuses of these clinics and/or their physicians might not be officially recognized, resulting in their limited capacities and have to refer the serious cases including HIV/AIDS patients to the public hospitals.

Nowadays, sex workers gain a lot of attentions from PHOs in STI management but the services vary from province to province. The types of services available are clinic-based and have limited opening hours but they also have mobile clinics to entertainment establishments. There was no other evidence that migrant groups such as, those who work in fishing-related industries, factory workers or general migrants in the communities such as housewives were able to access the STI services and how frequent they utilized the service. The utilisation by these groups is believed to be low because they are more likely to self-treat STIs by buying medication from drugstores or using traditional remedies (Press, 2004; PATH, 2004; Ohnmar, 2000).

The challenges in providing sufficient and quality healthcare services to migrant population is rooted in the unclear policy on migrant health in the Thai government which, also affects the budget constraints, their unfamiliarity in providing services to people from diverse cultures and a reluctance by the migrants to receive the services.

In some provinces the healthcare services are provided only to registered migrants. However, a study by Sirinirund et al. in 2005 showed that only 68% of registered migrant workers had been eligible for government healthcare coverage. This is due to a regulation by the CMHI Scheme that obliges the registered migrant workers to receive health services from only “assigned healthcare providers”. Unfortunately, the services do not reach some groups of migrant workers such as those working in farms and those moved by their employers to work elsewhere. There were also reported cases of migrants who had their registration documents including health insurance cards withheld by their employers so they cannot change jobs without notifying the employers because they had provided the advance payment for the migrant registration fees. However, even though the CMHI Scheme has been in place and benefits registered migrant workers they are still reluctant to seek treatment from public health facilities. This is because of the small merits perceived over the negatives plus the barriers they may face with the police and healthcare providers. In addition to their travel and co-payment of the healthcare costs migrants also have to take into consideration the loss they incur of their daily wage for being absent from work.

Stigma and discrimination still remains high in migrant communities which, hinders people from accessing HIV/AIDS treatment, care and support services and the fear of status disclosure. As a result the proportion of migrants seeking voluntary counseling and testing (VCT) for HIV as well as OIs treatment services is still small. The small numbers are evident in Phang Nga, Ranong, Trat and Tak.

ART programmes for migrant populations are still limited despite their entitlement to free antiretroviral (ARV) drugs. In some cases ARVs have been given to migrants living with HIV/AIDS through the support of NGOs or through out of pocket payment. It has been observed that the level of access to ART among migrants is high in Trat and Tak because of additional HIV/AIDS programme implemented and funded by GFATM. The GFATMs programme is called the “National Access for Antiretroviral Programme for People Living with HIV/AIDS (NAPHA) Project” and has been implemented in Tak, and the project ECAT in Trat and Tak Provinces. At the time of this documentation, Phang Nga reported to have an ART programme implemented by Medicins Sans Frontieres (MSF) which, resulted in a greater number of HIV positive migrants and pregnant women receiving ART and PMTCT services as compared to other provinces where similar programmes have not extended to cover the migrant population.

Psychosocial Support Programme

Though scarce, NGOs are recognized to play a strong role in providing psychosocial support to migrant populations, including HIV affected migrants and families. In addition, livelihood programmes such as vocational training, education, income generating training, and provision of temporary economic assistance to vulnerable persons and families are provided in some areas mostly by NGOs. Educational programme for children of migrant workers is an example of a social support activity that has been widely implemented in many provinces where there is a large community of migrants such as in Ranong, Tak, Trat and Samut Sakhon Provinces.

Chapter IV.

Data

Triangulation
and Analysis
of Six Studied
Provinces

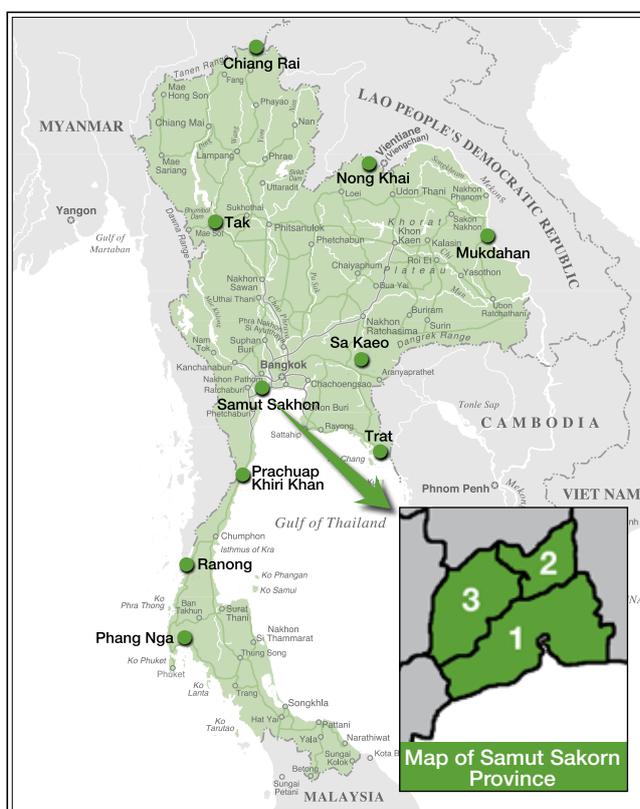
CHAPTER IV. DATA TRIANGULATION AND ANALYSIS OF SIX STUDIED PROVINCES

This chapter describes the outcomes from the data analysis and triangulation results of the provinces selected in this study. The provinces are: 1) Samut Sakhon; 2) Trat; 3) Prachuap Khiri Khan; 4) Phang Nga; 5) Ranong and 6) Tak. The existing data collected from these provinces were considered sufficient for a comprehensive analysis. Since migration contexts and HIV/AIDS in migrant population vary from one province to another, a province-specific analysis can provide more in-depth analysis on migrant characteristics, their risks and vulnerabilities to STIs and HIV infection and current programmatic response. The in-depth data analysis and data triangulation for each selected province lead to specific findings and recommendations for immediate action in responding to HIV/AIDS needs among vulnerable migrant and Thai population groups.

1. Samut Sakhon Province

Samut Sakhon is a major fishing port in the Gulf of Thailand and a small coastal province. It has close proximity to Bangkok (some 40 kilometres), a well developed infrastructure and is a heavily industrialised province. Samut Sakhon comprises of three districts: (1) Muang Samut Sakorn, (2) Krathum Baen and (3) Ban Phaeo. The northern part of Samut Sakhon is a typical Central Plain that is, suitable for farming and fruit tree orchards, while the southern part is bounded by mudflats, suitable for aquaculture and salt farming.

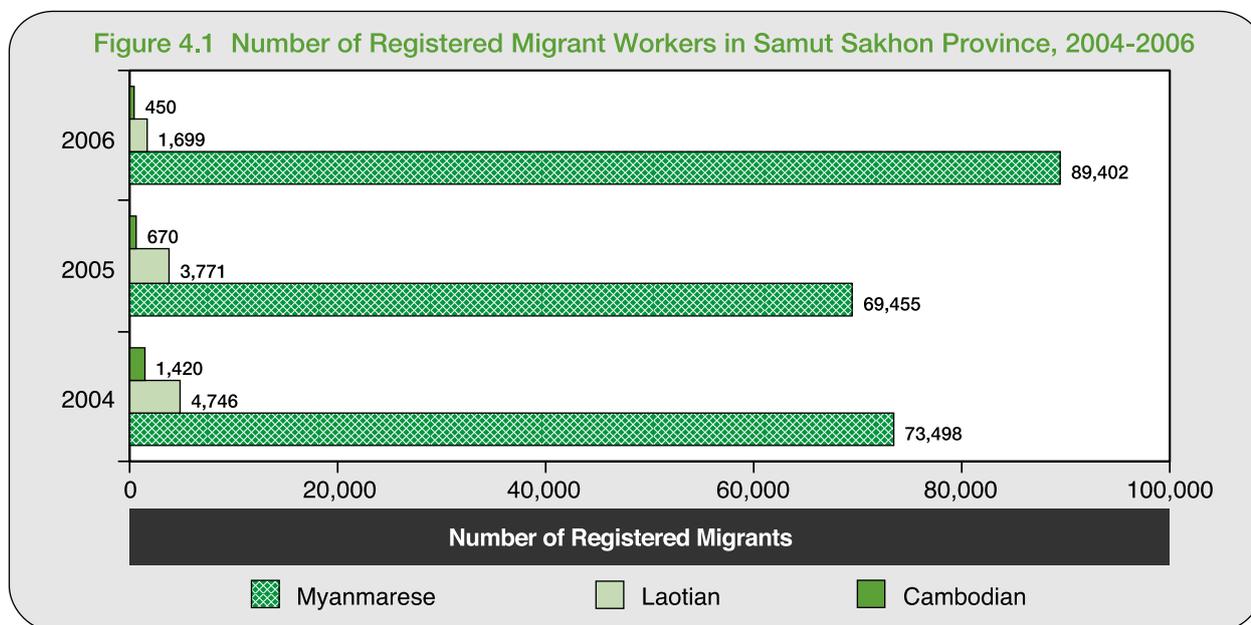
Samut Sakhon's economy is the second largest in Thailand with manufacturing accounting for 82.3% of the total GPP, followed by fishery. There are 4,243 factories, large and small ranging from textile, electronics, plastic, machinery, agricultural and seafood product processing. Samut Sakhon is designated as the centre for fishery and agricultural food processing in support of the national agenda on the "Kitchen of the World", ecotourism and transportation.



1.1 Migrant Demography

Migrant workers from neighbouring countries, particularly from Myanmar, play a key role in Samut Sakhon's economy. The ratio of Thai to migrant workers in Samut Sakhon is approximately 4:1 (Office of the National Economic and Social Development Board, 2007). It is important to note that almost half of the Thai population in Samut Sakhon is internal migrants from the north and the northeast regions of Thailand (Samut Sakhon PHO). The number of registered migrant workers equals to 79,664 in 2004 before decreasing to 73,896 in 2005 and then increasing to 91,551 in 2006. The estimated number of documented and undocumented migrant workers and their dependents in Samut Sakhon is as high as 200,000. (Danthamrongkul and Uthit, 2008).

Migrant workers from Myanmar accounted for 92-97% of all migrant workers in Samut Sakhon during 2004-2006 (Figure 4.1). The registered numbers of migrant workers from Cambodia and Lao PDR has decreased since 2004. It is worth noting that female migrant workers have increasingly shared in the Thai workforce market in many provinces including Samut Sakhon. The ratio of male to female migrant workers in the province during 2004-2006 was about 1.1:1.



Source: Samut Sakhon Provincial Office of Employment

Myanmar migrant workers occupy almost all employment sectors range from fisheries to agricultural, construction, manufacturing and domestic sectors (Table 4.1). In the town of Mahachai where the largest concentration of seafood processing factories is found, 90% of migrant workers are employed as seafood processors. The majority of Cambodian migrant workers are likely to engage in the fisheries sector, followed by construction work, but they are rarely found in other types of occupational sectors. Compared to the number of migrants from Cambodia, migrant workers from Lao PDR are a large number. They were more likely to disperse in small business sectors, followed by the fisheries industries, construction and domestic works.

Table 4.1 Distribution of Migrant Workers by Occupation and Country of Origin in Samut Sakhon Province, 2006

Occupation	Myanmar Migrant	Laos Migrant	Cambodia Migrant
Fisheries and Related Business	60,321	321	226
Construction Work	3,835	95	102
Agriculture and Livestock	1,235	43	6
Domestic Work	667	58	6
Factory Work	629	12	0
Others	22,715	1,170	110

Source: Samut Sakhon Provincial Office of Employment

1.2 HIV/AIDS and STIs Situation

The comparison of HIV prevalence between Thais and migrant population is shown in Table 4.2. The results in the table demonstrate that the infection trend in migrant workers is greater than in Thai men between 2002 and 2006. An exception was noticed in 2007 when HIV infection among Thai fishermen reached the level of 12.5%, drastically risen from zero percent in the previous five years.

Table 4.2 HIV Sero-prevalence in Thai and Migrant Populations in Samut Sakhon Province, 2002-2007

Target Population	2002	2003	2004	2005	2006	2007
Military conscripts	0	0	0.8	0	0.7	0.4
Thai fishermen	0	0	0	0	0	12.5
Migrant workers	2.0	0	3.0	1.0	1.5	0.5
Thai pregnant women*	N/A	N/A	1.0	1.3	0.8	N/A
Migrant pregnant women*	N/A	N/A	0.7	0.5	0.4	N/A

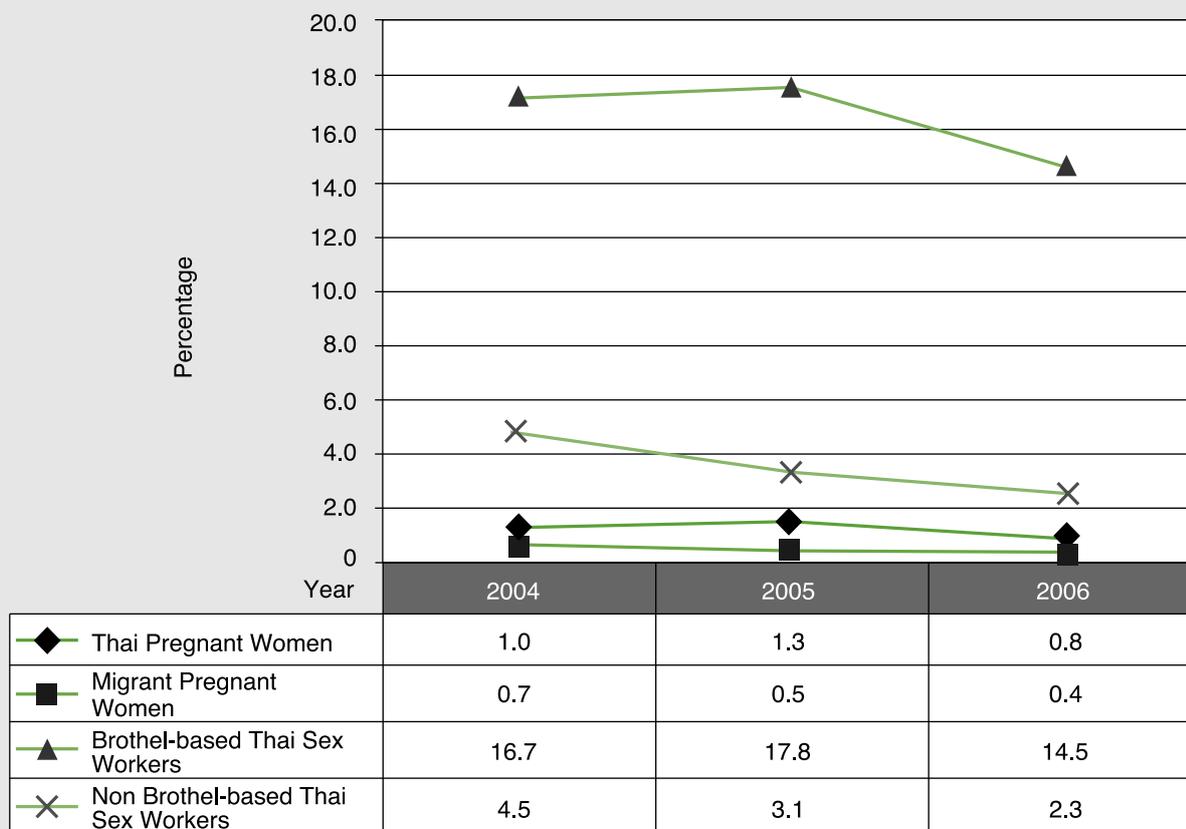
Note: * From Prenatal HIV Intervention Monitoring System (PHIM) database. HIV infection rate was calculated from women giving births at the government hospitals.

Source: Samut Sakhon Provincial Health Office, Sentinel Surveillance Survey Report

The HIV sero-prevalence level in Thai women contradicts that of Thai men whose rates were greater for all three consecutive years since 2004. Compared with the migrant women, the Thai pregnant women in Samut Sakhon also had a relatively higher prevalence for the same period. The HIV infection rates in Thai pregnant women stood at a level of 0.8-1.3% whereas the migrant pregnant women showed a slight reduction in HIV infection rate from 0.7% in 2004 to 0.5% in 2005 and 0.4% in 2006 (Table 4.2).

The infection trend in Thai sex worker groups particularly the brothel-based sex workers, still remains high. Both brothel-based and non brothel-based Thai sex workers had significantly higher levels of HIV infection than the general female population as represented by the pregnant women in the most recent years (Figure 4.2). This is possibly a reflection of the insufficient and/or ineffective condom promotion programmes in the past few years which targeted sex workers and their male clients and partners to use condoms continuously and engage in safer sexual behaviours.

Figure 4.2 HIV Sero-prevalence among Thai and Migrant Women in Samut Sakhon Province, 2004-2006

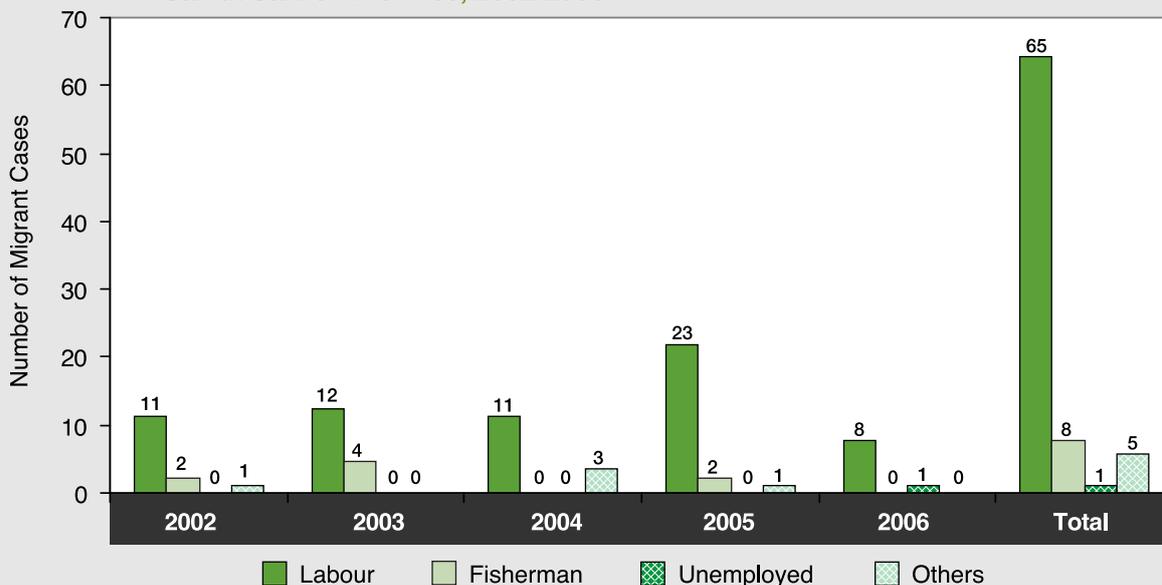


Source: Samut Sakhon Provincial Health Office

Samut Sakhon includes migrant populations as well as Thais in its reporting on HIV symptomatic and AIDS cases since 1997. As of December 2006, there were a total of 168 HIV symptomatic and AIDS cases and 84% were males. Almost all cases were Myanmar migrants (94%) and no reported case for Laotian or Cambodian. Around 88% of the cases came from Muang District followed by Krathum Baen (10.7%) and about half of the cases were single (51.2%) with only 16% of reported female migrant cases.

Regarding the occupations of HIV/AIDS reported cases, Figure 4.3 demonstrates that during 2002-2006 the majority of reported cases are labourers (65 of 79 cases; 82.2%) followed by fishermen (8 of 79 cases; 10.1%) and others (5 of 79 cases; 6.3%). According to the results, fishermen are not the largest group of HIV symptomatic and AIDS cases. However it is important to note that the “labourer” category is not defined in detail which reflects a lack of sensitivity in HIV/AIDS surveillance system and reporting in respect with the migrant context.

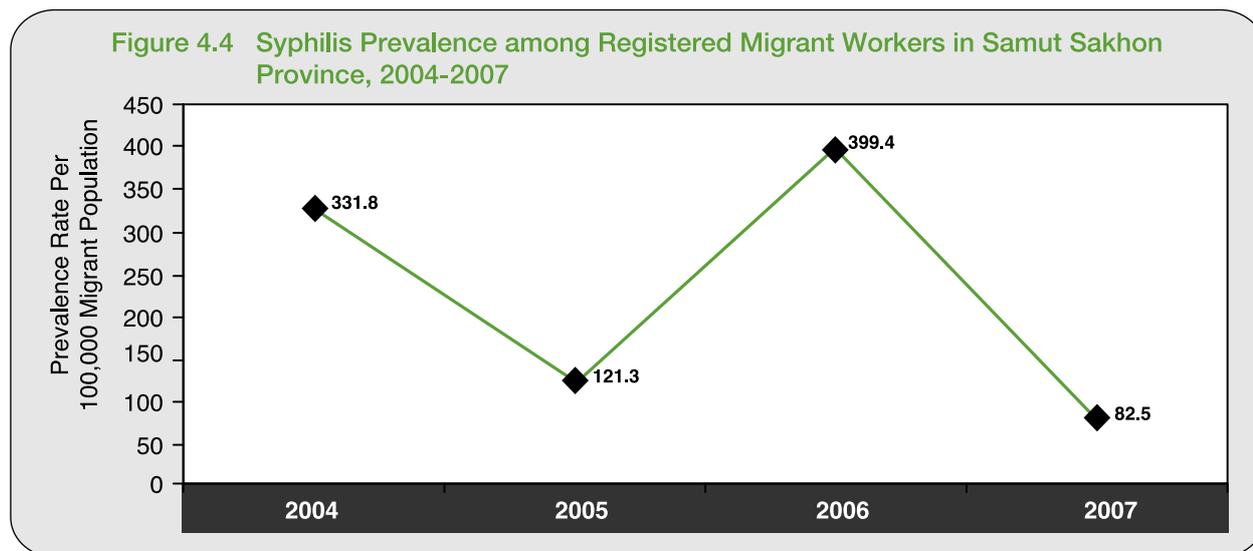
Figure 4.3 Number of Reported Migrant HIV Symptomatic and AIDS Cases by Occupation in Samut Sakhon Province, 2002-2006



Source: Samut Sakhon Provincial Health Office

The numbers of migrant workers undergoing medical examination during the work permit application process in the past few years have been lower than actual numbers of migrants registered. While the number of medical examination was 84,396 in 2004, 71,726 in 2005 and 89,384 in 2006, the number of registration was 80,243 in 2004, 73,896 in 2005, and 91,551 in 2006 therefore; migrant workers who are registered did not undergo the compulsory medical examination. The low numbers of migrants not undergoing the compulsory medical examination is linked to the change in the application procedure in the recent years. Registration is only done in a allocated and relatively short (about two months) timeframe which is announced by the government but the designated health facilities were unable to perform the medical examination for all migrants prior to issuance of work permit cards from the Ministry of Labor and Social Welfare (MOL). As a result, a number of migrants who underwent medical examination were unable to process their work permit application in the set period of time. Some migrants did not want to apply for a work permit because they only valued the benefit of holding a health insurance card but not the work permit card which, required additional fee. To counteract this issue the government allowed the MOL to issue work permit cards to migrants and requested them to submit the medical examination results afterwards. Nonetheless, it turned out that some migrant workers did not undergo medical examinations despite being granted their work permit cards.

Amongst seven communicable diseases that are curable (which is type II category under the medical examination guideline listed in the Chapter II above), the prevalence of syphilis in migrant workers in Samut Sakhon was fluctuated in the past four years with the highest rate of 399.4 per 100,000 populations in 2006 (Figure 4.4). Although the syphilis rate dropped to 82.5 per 100,000 populations in 2007, it is hard to use this data to draw any conclusion on the situation in the province.



Source: Samut Sakhon Provincial Health Office, Migrant Workers’ Medical Examination Records

According to the STIs surveillance report there is a recurrence of STIs in the Thai population in Samut Sakhon. The prevalence rate of STIs in 2007 was 11.7 per 100,000 populations, twice as high compared to 2006 (Table 4.3). In contrast, the prevalence rates of STIs among the sex workers had gradually reduced since 2003, from 0.6 per 100,000 populations in 2003 to 0.1 in 2007. The epidemiological investigations into male clients at STIs clinics indicated that many patients reported they engaged frequently with sex workers particularly migrant sex workers.

Table 4.3 STIs in General Thai Population and Sex Workers in Samut Sakhon Province, 2003-2007

Target Groups	Prevalence Rate Per 100,000 Population				
	2003	2004	2005	2006	2007
General population	17.8	17.0	6.3	5.1	11.7
Sex workers	0.6	0.3	0.1	0.1	0.1

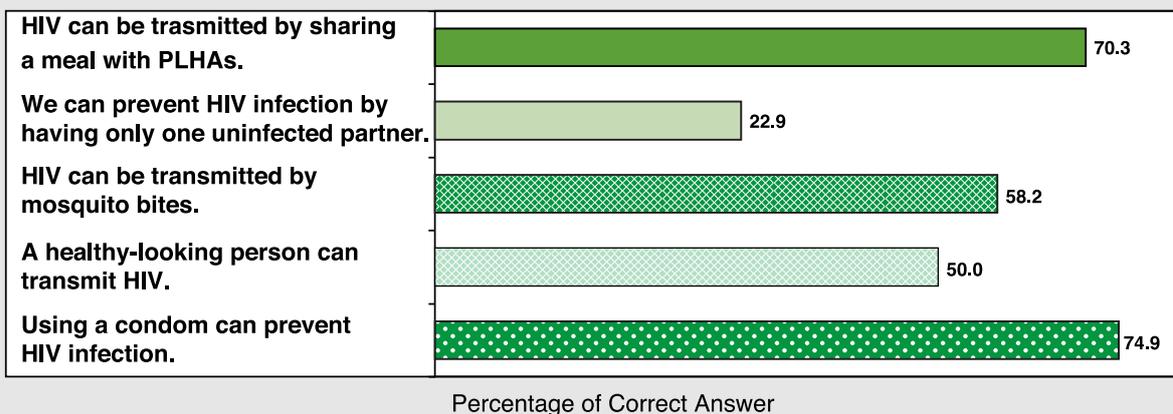
Source: Samut Sakhon Provincial Health Office

1.3 HIV Vulnerabilities and Risks

The risks of STIs and HIV infection vary among migrant workers in Samut Sakhon. PHAMIT baseline study reported that a very small proportion (3%) of migrant male workers from inland factory areas including Samut Sakhon had engaged with sex workers in the past 12 months. In comparison to other migrant groups in coastal areas such as, fishermen and fishery-related workers that is, 15% in Myanmar migrants and 34% in Cambodian migrants), who work in fishing business in Samut Sakorn. Another study carried out in 2003 cited around one quarter of Myanmar male factory workers in Samut Sakhon had experienced sex with sex workers (Thu, 2003).

From PHAMIT survey results migrant fishermen in Samut Sakhon had a noticeably high rate of condom use with sex workers (94.1%) but as low as 31.6% in casual sex with non-regular partners. The exposure level to condom education programmes among migrant workers is low at approximately 32% and those who participated in HIV/STIs education activities were less at only 29% according to the PHAMIT report. From BSS studies basic HIV knowledge among the sampled respondents was unsatisfactory (Figure 4.5).

Figure 4.5 HIV/AIDS Knowledge among Migrant Workers in Samut Sakhon Provinces, 2006



Source: Samut Sakhon Provincial Health Office, 2006 Behavioural Surveillance Survey

From the behavioural survey conducted in 2004 it was evident that compared to migrant workers Thai workers took greater risks for engaging in unprotected sex. The survey results revealed that the proportions of Thai male factory workers using condoms during sex with sex workers and when having casual sex were as low as 40% and 27.4% respectively (Samut Sakhon PHO, 2004). These findings are consistent with high STIs rate observed among the Thai population in the same year (17.0%) as indicated in Table 4.3. Another study conducted on Thai fishermen revealed that their visit to sex workers was relatively frequent. The results conveyed that 42% and 19% of the respondents reported to have sex in the past six months with sex workers and non-regular partners respectively (Rungkhureesathien and Champaklai, 2006). Of those who had sex with sex workers, more than 50% engaged with more than one sex workers. Condom use in last sex with sex workers was high (96.2%), while the rate in using condom with non-regular partners in the last sex was much lower (at 64%).

Thai men and migrant fishermen are often considered to be the most at-risk populations because of their frequent engagement in risky sexual behaviours and practices. Besides the frequency of visits to entertainment places which, often leads them to engage with sex workers the men also practice the art of manipulating their penises or tattooing their bodies due to the misconception that it brings more sexual pleasure (Press, 2004; WVFT, 2003). A recent survey found that one in every four Thai fishermen in Samut Sakhon had manipulated their penis (Rungkhureesathien and Champaklai, 2006). These practices are risky because of the potential for sharing unclean needles and equipments and the possibility of bleeding during these practices can contribute to HIV risk.

Although no detail from the surveys mentioned above was given on whether the sex workers were Thais or migrants, an assessment study by Program for Appropriate Technology in Health (PATH) pointed out that almost all of them were Thais (PATH, 2004). The majority of the brothel-based sex workers came from the north while those of non-brothel-based were from the northeast of Thailand. Condom use practices among sex workers as found in a recent survey were observed as slightly increasing from 13% in 2005 to 48% in 2006 but this is still considerably low overall (Samut Sakhon PHO, 2006).

1.4 Responses to HIV/AIDS Situation in Migrant Population

At present, there are two major projects focusing on HIV/AIDS in migrant populations in Samut Sakhon: PHAMIT and ECAT and both are funded by GFATM. There were some constraints in obtaining information regarding the programme implementation from the field. A summary of achievements in HIV/AIDS programme implementation conducted by both PHAMIT project and the provincial health service providers in Samut Sakhon is provided in the Table 4.4:

Table 4.4 HIV/AIDS Programme Implementation for Migrant Population in Samut Sakhon Province, 2006

Programme Type	Programme Coverage	
	PHAMIT Project	Samut Sakhon PHO
Outreach activities for BCC	Migrants in Muang District reached; - 7,000 fishermen - 300 sex workers - 160 employers/factory owners	Migrant in Muang District reached; - 2,400 fishermen
Condom distribution	Approximately 120,000 condoms	None
HIV/AIDS and STIs treatment and care	Very limited in service and number	- 64 migrants received VCT in the whole province - 3 migrant mothers received PMTCT services - 12 migrant patients received OIs treatment - 18 migrant patients received STIs treatment
Psychosocial support	Established four children learning centres to provide basic education to about 300 migrant children	Very limited in service and number
Capacity Development of migrant health workers	- 13 migrant health volunteers trained	- 200 migrant health volunteers trained

Source: 1. Raks Thai Foundation
2. Samut Sakhon Provincial Health Office

1.5 Discussion and Recommendations for Samut Sakhon Province

The current STIs/HIV/AIDS related data and on programmatic response, discussions, conclusions and recommendations for Samut Sakhon Province are presented below.

Data collection, management and use

It is a good outcome that the PHO has started to collect STIs/HIV related information among migrants in the province. Nevertheless the design of the data collection tool should be reviewed and modified according to the local migrant context. Samut Sakhon is an urban setting with diverse business sectors that host a large number of migrants as well as, a high proportion of registered migrants. The large numbers of registered migrants as opposed to the unregistered migrants suggests that there is a sufficient migrant population to conduct data collection (such as a survey on STIs/HIV related knowledge, attitude and practice), with a large enough sample size to help draw a clearer picture of HIV risks and vulnerabilities in each sub-population of migrant groups.

Although the current HIV reporting system identifies ‘migrant labourers’ as a key population living with HIV/AIDS in Samut Sakhon it is not able to differentiate sub-categories of the the different sectors comprising of ‘migrant labourers’. This is largely due to the reporting format which is designed for national data collection and not specifically to local needs. Ideally, a reporting system that could serve the needs of both local and national data analysis is preferred. The reported number of migrant PLHA in the province each year is minimal and therefore, a separate simple log sheet could be used to disaggregate the data as needed i.e. their occupations, their source communities, ethnicities, mode of transmission, etc.

The PHAMIT results from all the project sites in Thailand reported that a proportion (3%) of male migrant ‘inland’ factory workers who had engaged with sex workers whilst a similar study in Samut Sakorn

reported a much higher proportion (about one quarter) of Myanmar male factory workers who had sex with sex workers. It is unclear if the two studies represented the same category of migrant groups, but the proportions of the surveyed migrants who engaged in transactional sex in both surveys were relatively small. Their risks and vulnerabilities to STIs and HIV infection are unknown and it is not possible to draw any significant conclusions on this population group.

With the large number of migrants and their dependents living and working often in compacted living spaces of Samut Sakorn Province, local health authorities can conduct a well-designed comprehensive study to investigate the following topics: the typology of migrants and mobility pattern; migrants' exposure to STIs/HIV/AIDS related information and other services; their STIs/HIV status; and their knowledge, awareness and practice related to HIV/AIDS. Once the survey data is available it can be used as a basis for the STIs/HIV/AIDS programme design and implementation to ensure the appropriate allocation of the limited human and financial resources to ensure maximum impact on the control of the epidemic. Although not exhaustive, results from existing data triangulation such as the one used in this report could be used to guide the programme design. Considering that the authors could only obtain limited amount and types of data available in the province, a more thorough analysis and precise recommendations could be made once the available data is compiled and analysed.

STIs/HIV/AIDS situation and programmatic responses

Migrant Fishermen, Labourers and Sex Workers

Generally Thai and migrant fishermen are claimed to be the most at-risk population regarding HIV infection because of the vulnerable of their life style. Current STIs/HIV/AIDS related programmes in Samut Sakhon and the rest of Thailand are focusing on this population group. Yet the findings from this study do not fully support this perception and from the data presented above, only 10% of the reported PLHA are fishermen. It is stated that migrant fishermen are one of the largest migrant groups presented in the province; the accumulated number of reported HIV/AIDS symptomatic cases in this group during the past five years was only eight while labourers accounted for a total of 65 cases. Although the lengths of stay in Thailand and in Samut Sakhon as well as the sources of infection are unknown among the reported PLHA who are migrant fishermen, the behavioural survey in the province supported that 94% of migrant fishermen in this province used a condom when have sex with sex workers. Approximately one-third of the surveyed migrant fishermen reported their exposure to STIs/HIV/AIDS prevention programmes including condom promotion, which correlates the reports on the limited programme coverage implemented by both PHAMIT and PHO. With low level exposure to STIs/HIV/AIDS programme activities, low level of HIV related knowledge and one-third reporting condom use in casual sex, it is difficult to draw conclusion that this sup-population group is at low risk and less vulnerable to HIV infection even though there is a high level of condom use when they have sex with sex workers. Therefore, the prevention programmes for migrant fishermen needs to be continued and perhaps scaled up to ensure a wider coverage of the programme activities to futher increase levels of HIV/AIDS related knowledge and protective behaviours, particularly in casual sex.

The majority of the reported PLHA in Samut Sakhon are single male migrant labourers from Myanmar living and/or working in Muang District. It is unknown how and when these migrants contracted HIV and later become PLHA and whether they continued to engage in risky behaviours. Although the report on HIV/AIDS symptomatic cases cannot reflect the real HIV situation in migrant population as a whole but, this finding should be sufficient evidence to immediately extend the STIs/HIV/AIDS related programme services to tackle the labour group who are infected with HIV and explore their characteristics, risks and vulnerabilities to HIV infection. If nothing is done to increase prevention as well as care and support services to this group it may lead to a wider spread of HIV infection in the province and beyond given

the mobility of migrants. And if a migrant PLHA continues engaging in unsafe practices it will inevitably put a lot more people at risk.

Unfortunately, information related to migrant sex workers in Samut Sakhon is not available for analysis but, during this study it was found that many male clients attending STI clinics reported that they frequented migrant sex workers. It seems that migrant sex workers could be at risk and it is important for the relevant agencies to educate and provide appropriate knowledge and skills for migrant sex workers to protect themselves from STIs and HIV infection. An important analysis need to be conducted of who their clients are so that appropriate prevention activities can be introduced and strengthened.

Regardless of the sub-population group, the current programme responses to HIV/AIDS among migrant population in Samut Sakhon are extremely limited despite it being one of the most migrant-populated provinces in Thailand. The proportion of migrants targeted by the existing HIV/AIDS programmes is as low as 10% of 89,402 registered migrant workers in 2006. The coverage of all the programmes is estimated to be below 10% when unregistered migrants in the province are included. It is difficult to expect the programmes to have a positive outcome and an impact on the epidemic if programme coverage is not enhanced.

Thai Fishermen, Labourers, Sew Workers and Female Populations

On average HIV infection trends in migrant workers is greater than Thais. However, some of the data from routine surveillance and special studies suggest that there is an alarming infection rate in sub-population groups of Thai nationals in the province particularly the fishermen, pregnant women and sex workers. The level of STIs among the Thai population is also increasing. An example of this can be seen in Thai male factory workers who are at higher risk than migrant workers as they reported very low rate of condom use in both transactional and casual sexes. Almost all of the 42% of Thai fishermen who had sex with sex workers reported to use condoms (96%), the condom use rate in casual sex is much lower (64%). It was reported that more than half of the Thai male factory workers had engaged with multiple sex partners and one-fourth of them had manipulated their penis which, could have involved the sharing of unclean needles and equipments. Manipulated penises can cause condom breakage, tearing and irritation of the vagina (and the anus also if they engage in anal sex), which is a high risk for contacting STIs and HIV infection.

This study also found that the STI rates among Thai male factory workers was on the increase and could be related to the low rates of condom use reported by this sub-population that is, 40% used condoms with sex workers and 27% use condom in casual sex.

Thailand has a declining trend of HIV infection in sex workers but, there is an increasing trend in the general female population (i.e. pregnant women). HIV infection rates among brothel-based sex workers in Samut Sakhon have been at a consistent high level of about 15% or sometimes higher. The high rates of HIV infection may be due to the fact that the Thai sex workers are from the north and according to PATH's assessment HIV prevalence tends to be higher in certain regions due to both old and new epidemics. Although the STI prevalence among the Thai sex workers have reduced and remain at 0.1 per 100,000 populations since 2007, it is important to note that there is still a huge need to promote safe sex because less than half of Thai sex-workers reported condom use at 13-48%.

With high rates of HIV infection among Thai women than in Thai men, the prevalence rate among Thai pregnant women than migrant pregnant women is also high. The recurrence of STIs among the general Thai population in Samut Sakhon is an important reason to address these issues and reduce the risks and

vulnerabilities to STIs and HIV infection among Thai women. Something that needs further investigation is the characteristics of the Thai women who are most vulnerable to STIs and HIV because Samut Sakhon hosts a large number of internal migrants from the north and northeast of Thailand who come and fill the labour gaps in the province.

1.6 Conclusion

Migrants, in particular migrant fishermen are usually seen as one of the most-at-risk populations for HIV transmission. While the previous and current STIs/HIV related programmes in the province focus on migrant fishermen, however, the programmes reach limited numbers of the targeted population group. The numbers of target individuals the programmes reach are only the tip of the iceberg. The programmes have very little impact in the control of the epidemic given that this sub-population is the most-at-risk population.

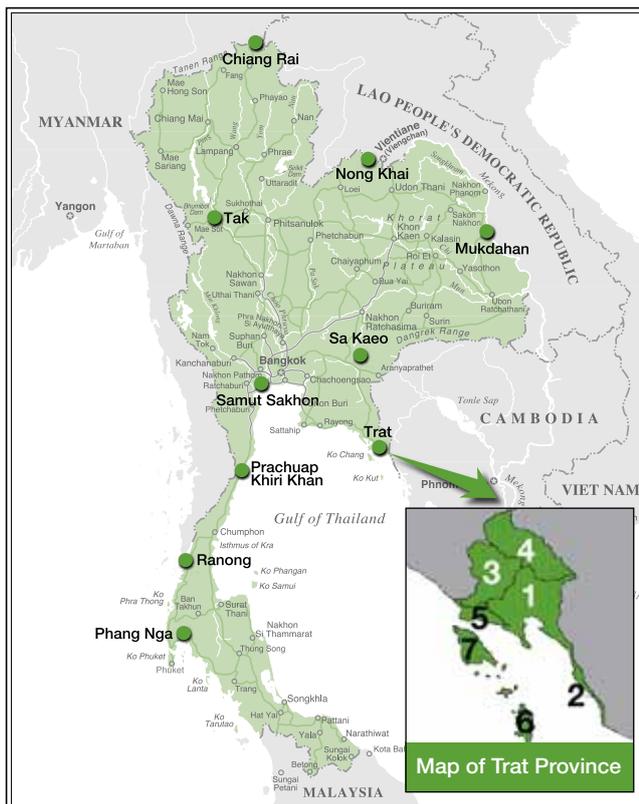
Other than migrant fishermen there are other population groups that are equal or even at higher risk of HIV infection. For example, migrant labourers are an important population to target for STIs/HIV prevention services. Further investigation is needed in order to design appropriate programmes for migrant labourers.

Due to the increasing HIV prevalence in Thai sex workers, Thai pregnant women and the increase of STIs rates in the Thai population implies that STIs/HIV prevention programmes for Thais has not been adequate. If programmes are not scaled up HIV transmission may increase. Future prevention programmes must emphasize on condom use in all sexual activities because in this study most of the targeted populations did not use condom in casual sex. It is essential to ensure that the programme activities reach as many of the target populations; otherwise resources and efforts may not impact and improve the current HIV/AIDS situation.

2. Trat Province

The Banthat Range running from the North to the South has a total length of 165 kilometres and forms the Thai-Cambodia border. There is a steep escarpment and a narrow coastal plain stretching alongside the foothills in Trat Province. Trat Province is divided into seven districts: (1) Muang Trat, (2) Khlong Yai, (3) Khao Saming, (4) Bo Rai, (5) Laem Ngop, (6) Ko Kut, and (7) Ko Chang. Geographically Trat has three districts adjacent to Cambodian land: Bo Rai District connects to Batambong Province; Muang Trat District connects to Phottisat Province; and Klong Yai District connects to Ko Kong Province of Cambodia.

The geographical features of Trat create opportunities for Cambodian migrants to enter Thailand. In total, Trat Province has 30 immigration check points along its borders of which seven are official entry points in-line with the formal agreement on cross-border procedure between the governments of Thailand and Cambodia. Another option for Cambodian migrants is to enter Thailand by sea. As a result Trat Province is considered to be a perfect transit point and destination for Cambodian migrants who want to enter Thailand.

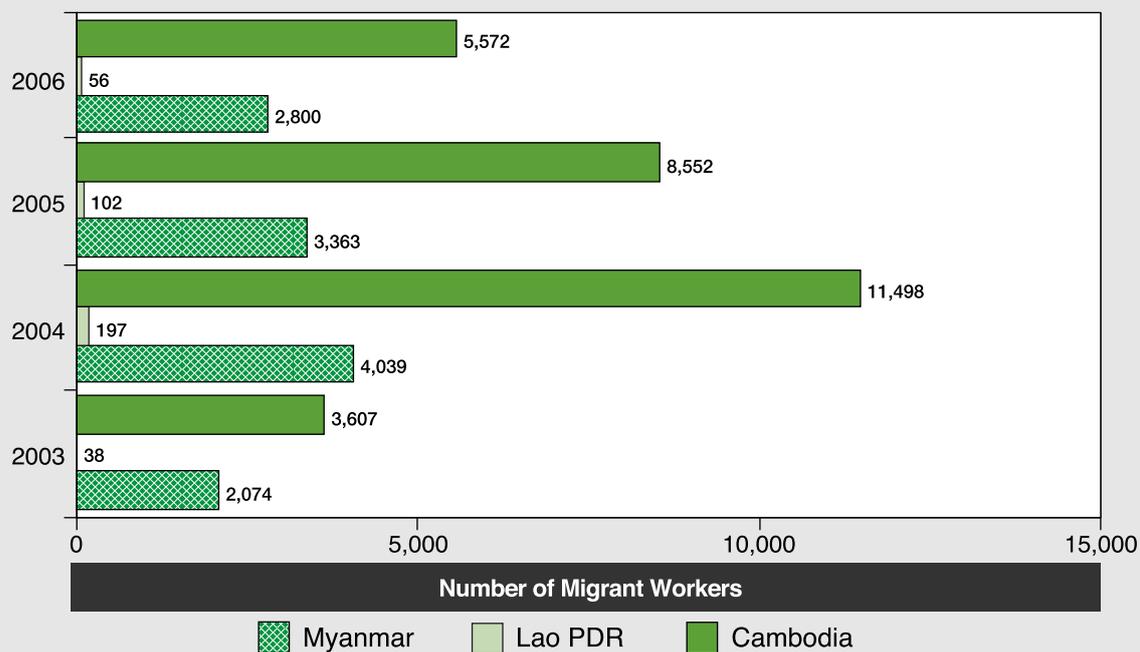


Currently the economy in Trat is agricultural-based despite being designated as the hub of marine tourism and Indochina trade. Fishery alone accounts for 28.8% of the total GPP and 62.5% comes from the agriculture sector. The main agricultural product is fruit followed by, fishing and aquaculture products such as black tiger prawns, and rubber. Other major sources of income are wholesale, retail trade, and logistics. The value of border trade with Cambodia in 2006 was 1.1 billion Bahts. Trat's fishery sector relies almost entirely on migrant workers from Cambodia and Myanmar (Archavanitkul, K. et al, 2007).

2.1 Migrant Demography

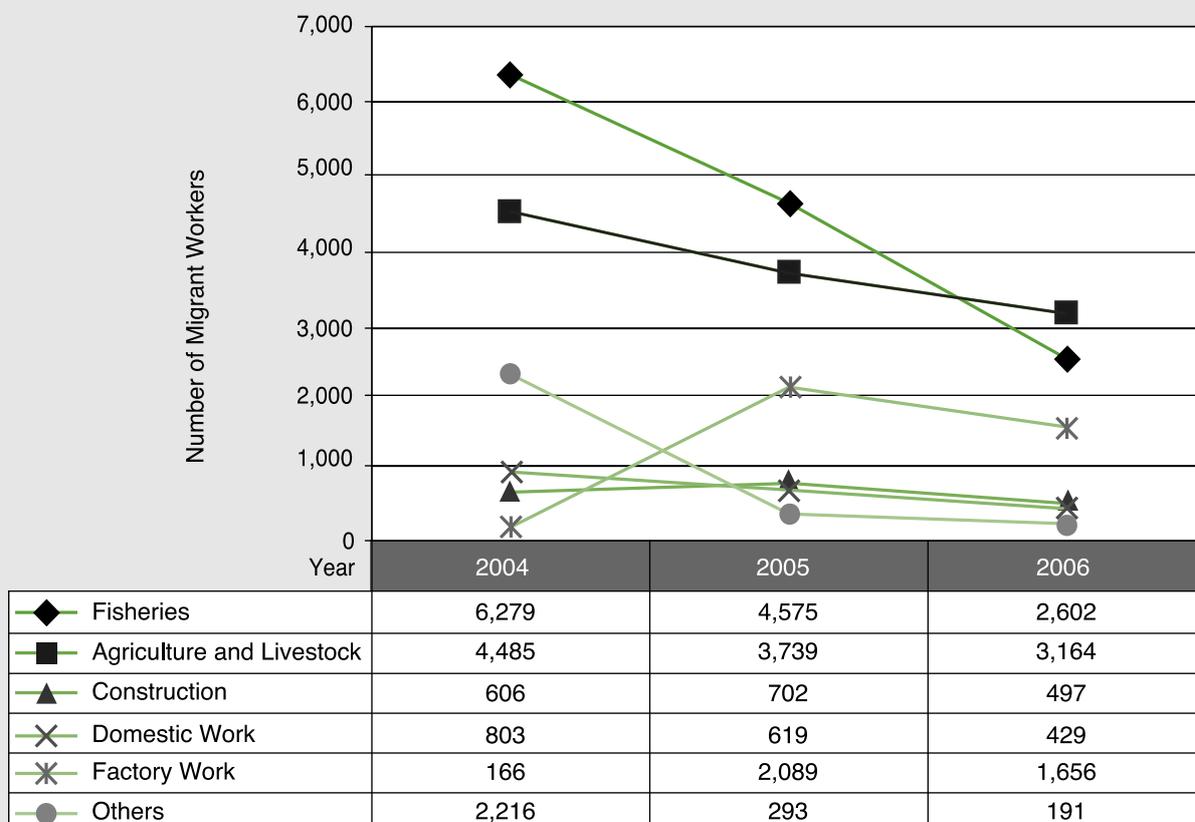
From the documents analysed in this study most of the registered migrant workers in Trat Province are from Myanmar and Cambodia (Figure 4.6). The figure shows that two-third of the migrant workers are from Cambodia and one-third are from Myanmar. Districts with the highest number of registered migrant workers are coastal districts of Muang Trat followed by Khlong Yai and Laem Ngop. In 2004, nearly half of Trat's migrant workers were employed in the fishery and seafood processing sectors and about 30% in agro-industry. In 2005 the migrant workers hired in fishery and seafood processing sectors were 38% and 31% respectively. In 2006, the number of migrant workers employed in fishery and seafood processing industries reduced to almost half of that in 2005. Between 2004 and 2005, the number of migrant workers employed in factories sharply increased before slightly dropping in 2006 (Figure 4.7). Nonetheless, fishery, agriculture and livestock, and factory industries have always been the most popular employment sectors among migrants in Trat Province.

Figure 4.6 Distribution of Migrant Workers by Country of Origin in Trat Province, 2003-2006



Source: Trat Provincial Health Office

Figure 4.7 Number of Registered Migrant Workers by Occupation in Trat Province, 2004-2006



Source: Trat provincial Health Office

There are many female migrants who work in the agriculture sector followed by the seafood processing industries and domestic works. The number of female migrant workers from Cambodia in Trat's workforce is growing with the male-female ratio being 1.6:1 in 2006 and then it slightly changed to 1.9:1 in 2005.

There are many Cambodian migrant workers in the different types of occupations except agriculture where Myanmar migrant workers make up the majority (Table 4.5).

Table 4.5 Distribution of Registered Migrant Workers in Trat Province by Occupation and Country of Origin, 2004-2006

Occupation	2004			2005			2006		
	Myanmarese	Cambodian	Laotian	Myanmarese	Cambodian	Laotian	Myanmarese	Cambodian	Laotian
Fisheries	759	5,473	47	485	4,074	16	235	2,361	6
Agriculture and Livestock	2,994	1,372	119	2,597	1,083	59	2,334	797	33
Construction Work	67	535	4	60	639	3	63	432	2
Domestic Work	46	748	9	52	558	9	42	380	7
Factory Work	8	158	0	125	1,950	14	99	1,550	7
Others	165	2,033	18	44	248	1	27	163	1

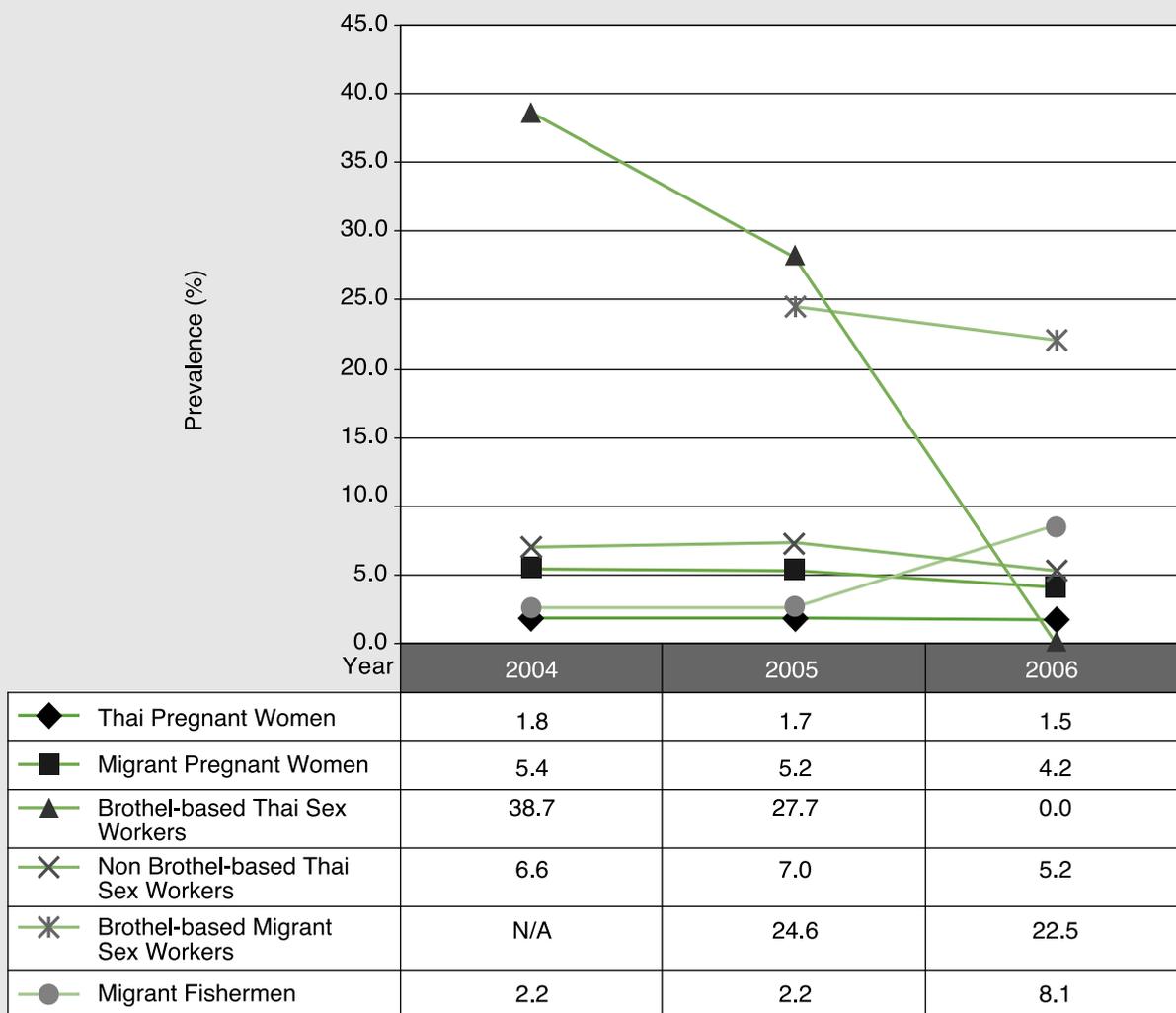
Source: Trat Provincial Health Office

During the observation of this study it was noted that Cambodian migrant workers reside in Trat Province for long periods of time. It is estimated that one-fourth of respondents in a survey had been living in Thailand for 6-10 years. As a result, the majority could speak and comprehend the Thai language fairly good (53% and 70% respectively). Fifty percent said they had never returned to Cambodia since they came to Thailand (Trat PHO, 2006).

2.2 HIV/AIDS and STIs Situation

The HIV situation in Trat Province between 2004 and 2006 was alarming as illustrated in Figure 4.8. HIV sero-prevalence in Thai pregnant women was consistently higher than the national level. The infection rates in migrant pregnant women between 2004 and 2006 were about three folds greater than in Thai pregnant women. These high rates are an indication that HIV had already spread beyond the high risk male population to the partners and families of both Thais and migrants.

Figure 4.8 HIV Sero-prevalence among Various Groups of Thai and Migrant Populations in Trat Province, 2004-2006



Source: Trat Provincial Health Office, sentinel surveillance survey.

HIV sero-prevalence in migrant fishermen significantly increased to 8.1% in 2006 from 2.2% from previous years. To date, HIV sero-prevalence among sex workers still remains high. There was an exception for Thai brothel-based sex workers because the infection rate reduced sharply from 27.7% in 2005 to zero in 2006. For migrant sex workers, the infection rates were continuously high at greater than 20% within two consecutive years which is a similar trend to that of migrant fishermen.

In 2002 and 2006 there were 286 HIV/AIDS symptomatic cases reported within the migrant population (Table 4.6). Khlong Yai had the highest number of reported cases of 157, Muang with 72 cases and Khao Saming with 26 cases. Among the Thais, the majority of HIV/AIDS reported cases were found in Muang District (601 cases), followed by Bo Rai (365 cases) and Khao Saming (293 cases). Among the Thai cases, there were more males than females HIV/AIDS cases reported in all districts. The ratio of male-to-female HIV/AIDS cases reported in the migrant group was similar to the Thai cases but, more migrant females than males were identified in Ko Kut and Khao Saming Districts. Of particular note in Ko Kut Island there were a large number of reported cases in Thai men and migrant women. Ko Kut is a small border island and is well known as a transit point for migrants and a good shelter port for fishing

Migration and HIV/AIDS in Thailand:

Triangulation of biological, behavioural and programmatic response data in selected provinces ■

boats to dock during the monsoon season. There is a large number of sex workers from Cambodia who work on the island (Press et al., 1999).

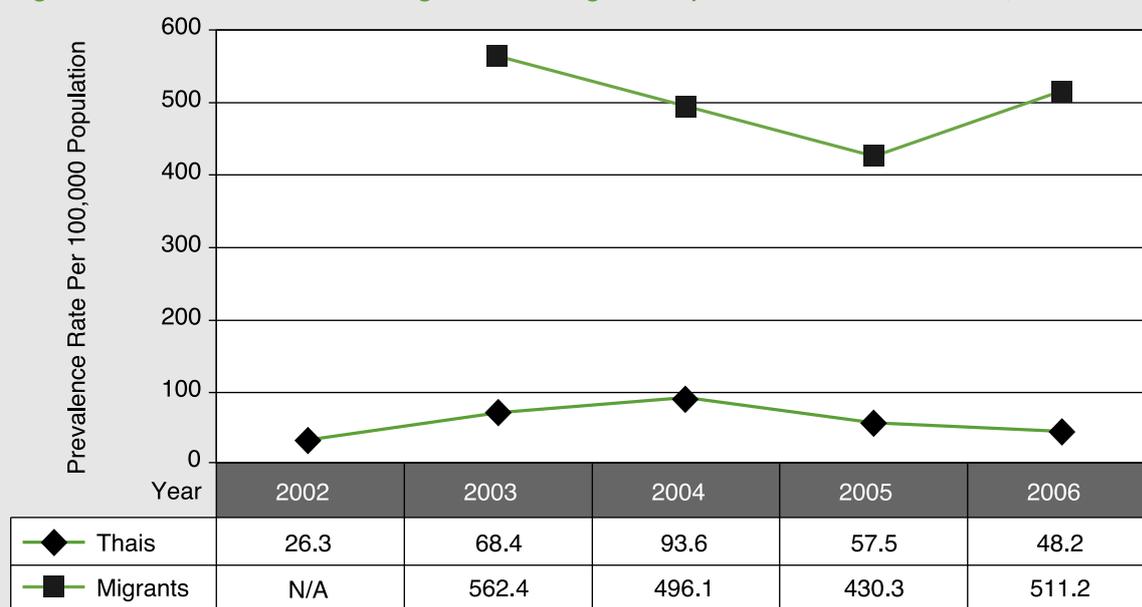
Table 4.6 Reported HIV Symptomatic and AIDS Cases in Thai and Migrant Populations in Trat Province by Sex, 2002-2006

Population Group	Sex	Total	Reported District						
			Muang	Khlong Yai	Khao Saming	Bo Rai	Laem Ngop	Ko Chang	Ko Kut
Migrant	Total	286	72	157	26	5	12	9	5
	Male	152	38	86	12	3	6	6	1
	Female	134	34	71	14	2	6	3	4
	Male:Female	1:0.88	1:0.89	1:0.83	1:1.17	1:0.67	1:1	1:0.5	1:4
Thai	Total	1,689	601	281	293	365	66	66	17
	Male	1,081	378	192	184	229	41	41	16
	Female	608	223	89	109	136	25	25	1
	Male:Female	1:0.56	1:0.59	1:0.46	1:0.62	1:0.59	1:0.61	1:0.61	1:0.06

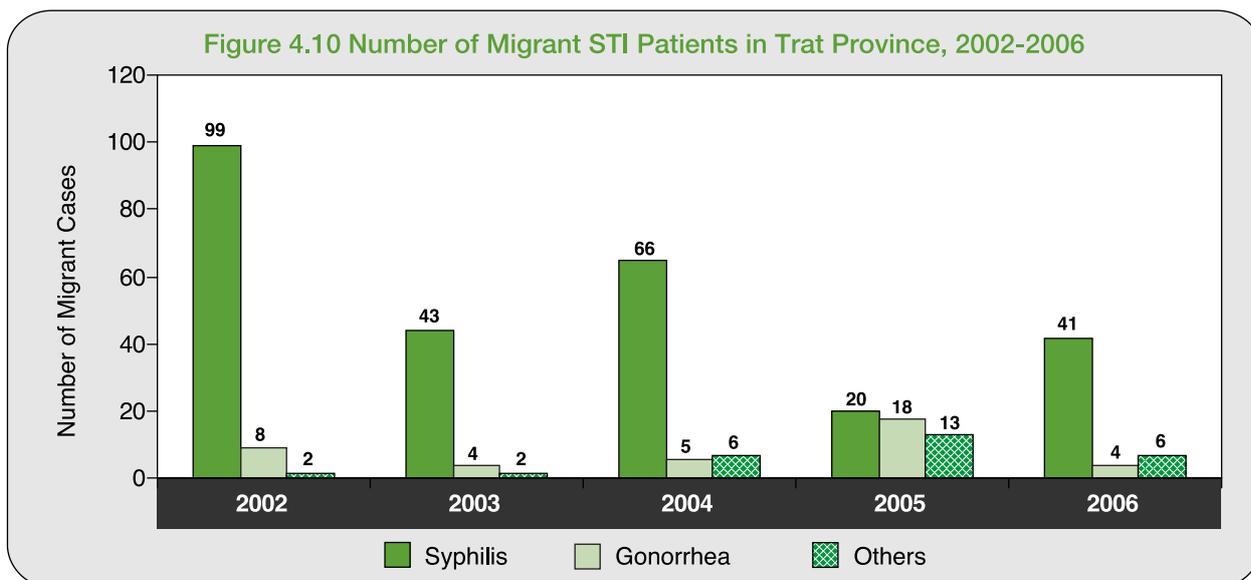
Source: Trat Provincial Health Office, HIV/AIDS Surveillance Report

Consistent with the HIV prevalence trend, STIs are also very high among migrants than Thais (Figure 4.9). From the various types of STIs in the migrant population (Figure 4.10), syphilis and gonorrhoea are the most common among migrants.

Figure 4.9 STI Prevalence among Thai and Migrant Populations in Trat Province, 2002-2006

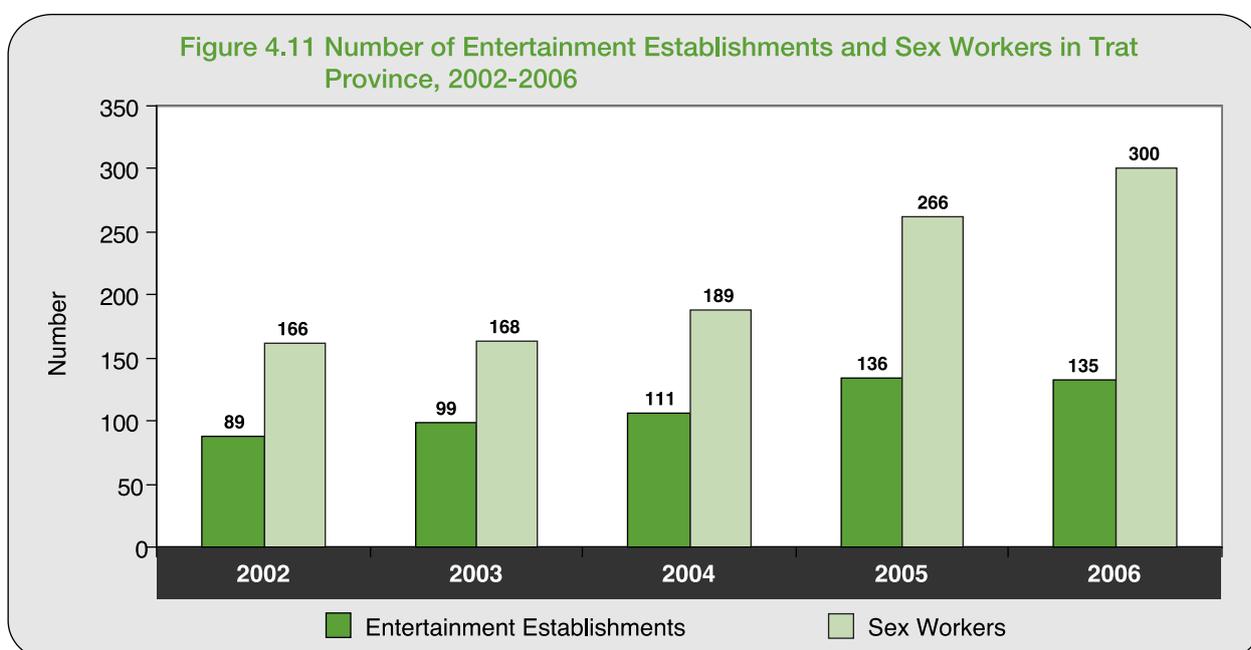


Source: Trat Provincial Health Office



Source: *Trat Provincial Health Office*

Brothel-based female sex workers in many migrant communities are predominantly Cambodian women (RTF, 2008; Press, 2000; OPTA and FHI, 1998). There are also a small proportion of Vietnamese sex workers in the area. Trat PHO conducted its annual sentinel surveillance survey in the entertainment establishments and discovered that the number of sex workers in the past five years has significantly increased (Figure 4.11). The numbers of entertainment places increased between 2004 and 2005 but remained stable in 2006. There was a high turn-over of brothel-based sex workers with an average time of staying at one place being six months (Press et al., 1999).



Source: *Trat Provincial Health Office*

2.3 HIV/AIDS Vulnerabilities and Risks

Based on some studies reviewed, the overall trend of safe sex behaviour among Cambodian men is higher than what was previously anticipated. In 2000 there was a study conducted among Cambodian fishermen in Klong Yai District and it was reported that approximately three quarters of the sampled population had engaged in sex with sex workers (Asian Research Centre for Migration, Institute of Asian Studies, 2004). According to the study, approximately 71% of the sampled population stated that they consistently used condoms (Chantavanich et al., 2000). In 2004 the PHAMIT baseline assessment cited similar results and it concluded that 59% of Cambodian migrant workers in this province who were engaged with sex workers that 96% used condoms in their last sex. However, similar to migrant workers in other provinces studied, condom use with non-regular and regular partners was still low. The PHAMIT baseline study indicates that among its target provinces condom use during sex with sex workers and with non-regular partners was the highest amongst Cambodian migrant workers in Trat.

According to a 2006 behavioural survey conducted by Trat PHO, the number of migrants (Cambodia and Myanmar) who came for medical examinations during their work permit application process there were approximately 47.3% migrant men who were single and stated they had sex in the past 12 months. Of the 47.3% there were 60.9% who had sex with sex workers and 30.4% with casual partners but only 32.3% of those who had sex used condom in their last sex. Among the married men, 55% had sex with sex workers and 10% with casual partners and only 7% had used a condom in their last sexual engagement. We can conclude that married men were more likely to be at risk of HIV/AIDS and as a result they could transmit HIV to their partners and families. HIV sero-prevalence in migrant pregnant women in 2006 was reported to be as high as 4.2%.

Regarding the HIV/AIDS related knowledge and awareness among migrants in Trat Province, the research team could only obtain limited information since the data from PHAMIT project was not available for analysis. According to the study Conducted by Trat PHO in 2006, the majority of migrant workers in Trat Province have heard of HIV/AIDS. The Cambodian migrants had a higher basic knowledge on HIV/AIDS than the Myanmar migrants. Sixty-nine percent of the group sampled reported they have had HIV testing in the past.

2.4 Responses to HIV/AIDS in Migrant Population

At present the most common sites for HIV/AIDS programme implementation for migrant populations are in Khlong Yai and Muang Trat districts. The programmes in these districts target mainly fishermen and seafood processors. The PHAMIT HIV/AIDS project is one of the projects currently being implemented in the province. Although the number of registered migrant workers was recently reported as 8,428 it is more likely that there are three to four times as many more migrants in the province but most are unregistered.

Information from interviews with Trat PHO and RTF staff regarding programme interventions that are implemented with an approximate number of migrants reached is illustrated in Table 4.7. It is worth noting that large quantities of condoms were distributed in Khlong Yai and Muang Trat districts in 2006. The number of migrants who benefited from the outreach programmes was low with only one-fourth of the total registered migrants reached.

HIV treatment and care programmes for migrant populations in the province are progressing in comparison to other provinces. Migrant populations are not included in available ART programmes in Thailand but recently the Thai MOPH and Cambodian MOPH signed a memorandum of understanding (MOU). The MOU stipulates that a collaborative effort is needed for the HIV/AIDS treatment and care of Cambodian migrants including the provision of ARV drugs which are provided free-of-charge at Ko Kong Hospital

on the Thai-Cambodian border. The number of migrant PLHA benefiting from this still remains small because of factors such as, transportation costs to Ko Kong Hospital, loss of income if one takes a day from work to seek treatment and the strict service guidelines of Ko Kong Hospital that requires PLHA to complete three visits prior to the entitlement for ART.

At present Trat is a pilot province for the GFATM supported ECAT project to provide ARV drugs to HIV positive pregnant women in the migrant populations. In 2006, there were 37 pregnant migrant women that benefited from the PMTCT service programme who otherwise would not have been able to access the PMTCT services. An urgent response is required to meet the needs of this vulnerable group including services such as, VCT and free ARV drugs to reduce mother-to-child transmission.

Table 4.7 HIV/AIDS Programme Reach for Migrant Population in Trat Province, 2006 (Only Muang and Klong Yai Districts)

Category	Number / Quantity
Number of Registered Migrant Workers	8,428
Estimated Number of Migrant Population	Three to four times higher than the registered number
Number of Migrants reached through Outreach for BCC	2,000
Number of Migrants Received HIV Counseling and STIs Treatment	150
Number of Migrants Received PMTCT Services	37
Number of Migrants Received Psychosocial Support	50
Number of Migrants Participated in PLHA Self-help Group	30
Number of Migrant Health Volunteers	140
Number of Condom Distributed (pieces)	180,000

Source: Raks Thai Foundation and Trat Provincial Health Office

2.5 Discussion and Recommendations for Trat Province

The STIs/HIV/AIDS related information among migrants in Trat Province although very limited is varied given the different geographical locations and the many sub-populations of migrant groups who reside in the province. It is difficult to draw clear conclusions however, there is some discussion and recommendations that can be made to improve the Trat Provincial HIV/AIDS Programme.

Data collection, management and use

Trat is one of the provinces in Thailand with the richest data related to STIs/HIV/AIDS among migrants and other populations but, the existing data is still insufficient for an in-depth analysis. Despite being a province with large numbers of migrants the information related to migration and STIs/HIV/AIDS in Trat Province is limited. Migrant fishermen (mostly Cambodian) are seen as a high risk group to HIV infection in Trat Province because the HIV sero-prevalence surveillance and behavioural surveys mainly focus on this group. One-third of the migrant population in Trat Province (mostly from Myanmar) are working in agricultural and construction sectors and the amount of HIV related information provided to them is unknown. Like other provinces, the reports on migrant HIV/AIDS symptomatic cases indicate 'labourers' as the predominant group rather than fishermen. As was indicated in Samut Sakorn Province, it is important to further explore the composition of the 'labourers' group in order to identify their risk behaviours and vulnerabilities.

Trat Province hosts a big group of migrants from Cambodia and Myanmar and this makes it difficult to determine which group has higher risk or vulnerability to STIs/HIV. It is important to modify the surveillance survey and reporting system and disaggregate the migrant population health data and differentiate the labour sectors, countries of origin and ethnicities for appropriate HIV/AIDS programme design.

Trat Province is a key transit point mostly for Cambodian migrants but also for other migrants in transit to other provinces of Thailand. There are more migrants in transit than those who live and work in the province. Rigorous methodologies should be created in the surveys to better understand the length of time migrants transit in Trat and their interaction with others in the community. The information from the survey will be useful for identifying migrants in transit risk behaviours and vulnerability which, will help to also identify gaps and the opportunities to further improve access to health services in the area. It would be inappropriate to make any assumptions and generalise all migrants as high risk population for STIs/HIV. It is important to take into consideration the various business sectors, countries, risk behaviours and vulnerabilities – as different migrant groups work in the same sector in the same geographical area do not have the same risk and vulnerability – to design a more informed and appropriate STIs/HIV/AIDS service programme for migrant groups.

STIs/HIV/AIDS situation and programmatic responses

HIV sero-prevalence data among migrant fishermen shows an increase from 2.2% in 2004 to 8.1% in 2006. The majority of the reported HIV/AIDS symptomatic migrant cases were from Khlong Yai and Muang Districts. These two districts have a high concentration of migrants so it is appropriate that current HIV/AIDS programmes being implemented by local health authorities and NGO focus on fishing and related businesses along the coastal areas. It is unclear if the surveillance surveys were conducted among registered migrants or both registered and unregistered migrants. The Thai government allows only migrants who registered the previous year to renew their registration and since 2004, the migrants registered are the same cohort of migrant population. If surveillance was conducted among registered workers it can be assumed that the increased rate of HIV sero-prevalence is due to new infections and an urgent programme is needed to combat HIV transmission among this population.

The overall number of registered migrants in Thailand has decreased gradually. In Trat Province it has been noted that the proportion of migrants working in the fishing and related businesses has declined. Almost half of migrants in Trat Province in 2004 (over 6,000) were registered in the fishing and related industries but then it decreased to less than one-third within all the sectors in 2006. This may affect achieving programme targets and coverage to migrant groups outside of the fishing and related industries.

Studies from 2000 and 2004 among Cambodian workers in fishing and related businesses reported more than 60% had experienced sex with sex workers. Condom use rate with sex workers was as high as 96% in all PHAMIT sites during their 2004 survey but condom use with regular and casual sex partners was still low and this was identified in other provinces. More than 60% of the registered migrants (in various labour sectors including fishing and related businesses) undergoing their medical examination surveyed stated to have had sex in the past 12 months with sex workers whilst the other 30% had casual sex partners. Regardless of the types of sex partners, slightly less than one-third of them reported using a condom in their last sex. These findings suggest that the proportion of male migrants involved in transactional and casual sex was relatively high. The condom use rate among Cambodian migrants and sex workers was very high but condom use rate among Cambodian migrants and their casual sex partners were low. The data from the survey shows that the overall rates of condom use among migrants and sex workers and their casual sex partners were very low. This is an indication to further explore better ways to promote universal safe sex and condom use among migrants in fishing and other business. It is worth noting that large volumes of condoms (180,000 pieces) were distributed in Muang and Klong

Yai Districts in 2006 by the PHAMIT Project. It is expected that condom use rate among migrants with all types of sex partners will increase in the future.

There were 55% of male migrants who are married had sex with sex workers and 10% had casual partners yet their condom use rate in the last sex was extremely low (less than 7%). This data shows that married male migrants were likely to be at risk of STIs and HIV infection and a high probability they could transmit STIs/HIV to their spouses and other sex partners and the data of HIV infection rate among migrant pregnant women is a strong indicator of this probability. Although decreasing, the HIV infection rates in migrant pregnant women between 2004 and 2006 were relatively high (4.2-5.4%), and were three times higher than the rates in Thai pregnant women within the same province. The rate in migrant pregnant women is an indication that HIV has spread beyond the high risk male population to their partners and families. The future HIV/AIDS programme in this province may require more focus on HIV/AIDS care, treatment, support and prevention.

The proportion of female migrants in Trat Province has gradually increased with a majority working in agriculture sector and factories. Unfortunately only a small number of them have benefited from the current HIV/AIDS services targeting fishing and related businesses. To ensure the gender balance of the provincial HIV/AIDS programme it is important to expand the STIs/HIV prevention programme coverage to other sectors where mostly female migrants are employed.

Approximately half of the reported HIV/AIDS symptomatic cases among migrants were female. In some districts there were more female than male cases such as in Ko Kut and Khao Saming but in Muang and Khlong Yai districts there were less female cases than male. This not only shows the importance of expanding HIV/AIDS services targeting migrants in these areas but also the importance of delivering female migrant-friendly services in this province. There is also a strong indication that despite limited HIV/AIDS services provided in these areas, female migrants are not less accessed than male migrants. However, more services might be needed in these areas – not only for prevention and VCT among female migrants and PMTCT but also for care and support for those who need these services. It will be useful to explore and document contributing factors and mechanism that enable female migrants to access health services and replicate or modified as good practice.

There has been a growth in the Trat tourist industry and the number of entertainment places and sex workers has dramatically increased in the past five years. The HIV sero-prevalence among Trat sex workers is high. Brothel-based female sex workers who are migrants are predominantly Cambodian women, with a small proportion of Vietnamese women. HIV infection rates among migrant sex workers are high (over 22%) and STI rates were much higher than the national level and amongst Thai sex workers. The behaviours related to HIV infection and condom use rates amongst the migrant sex workers are unknown. Given the high STIs and HIV rates among female migrant sex workers is a strong indication of HIV transmission occurring between the migrant sex worker and their male client groups and/or other sexual partners. Information on the types of clients and sex partners of migrant sex workers are unknown but, it is important to explore this to improve HIV/AIDS programmes to control the epidemic in migrant sex workers and other relevant sub-populations.

This study also found that brothel-based sex workers in Trat Province have a high turn-over with six months being the average time for staying at one place. There is a possibility that some of the sex workers may have been previously infected with HIV before 'importing' it into Trat Province. It is also likely that those who were already infected whilst in Trat Province could have 'exported' HIV to other areas within and outside of Thailand. An innovative VCT programme should be developed and implemented in this setting to ensure that sex workers are aware of their HIV status before migrating to other areas where friendly STIs/HIV/AIDS services may or may not exist. An assessment of mobility and route patterns is

also important to explore because migrant sex-workers are a very mobile population in Trat Province. Assessing the mobility patterns will help to identify where and how to most effectively address their needs related to STIs/HIV prevention within and beyond Trat province's frontier.

The coastal districts of Muang followed by Khlong Yai and Laem Ngop have the highest number of registered migrants. Targeted HIV/AIDS programme for migrants has been implemented in Muang and Khlong Yai Districts. The highest number of reported HIV/AIDS symptomatic cases among migrants was found in Khlong Yai, followed by Muang, Khao Saming and Laem Ngop Districts. Khlong Yai is a border crossing town to Koh Kong in Cambodia therefore, it is important to further explore if the migrant HIV cases lived and worked in the area or on whether they were on their way to other areas of Thailand or returning home to Cambodia. Such information will be useful for future planning of HIV/AIDS care, support and treatment for migrants and also for strengthening cross border collaboration as stated in the Memorandum of Understanding between Thai and Cambodian MOPH. Although outside of the mandate of the health sector, information such as job opportunities and income generation channels will help strengthen the cross-border collaboration and migrants will no longer need to constantly be mobile in search of jobs which may result in a better treatment outcome.

A study by Trat PHO in 2006 confirmed that basic HIV/AIDS knowledge among migrants was fairly good, particularly among Cambodian migrants. The study also reported that more than two-third of migrants had undergone a HIV antibody test. The study did not provide state on the source of HIV/AIDS knowledge of migrants. The majority of the Cambodian migrants in Trat Province migrated to Thailand about six or more years ago and half stated they had never returned to Cambodia since arriving. It is likely that the majority of migrants obtained related knowledge before migrating to Thailand. The number of migrants reached in 2006 (though only by one NGO) was more than 2,000 migrants which is approximately one quarter of the registered migrants (8,428) in the province in the same year. Comparing the number of registered and unregistered migrants in the province (about 25,000-34,000) the programme coverage is extremely small (less than 10%) and it is difficult to draw the relationship between the current programme level of migrants' knowledge on HIV/AIDS. Nonetheless, the BCC programme needs to be scaled up to improve the programme coverage. The use of condoms needs to be improved so that migrants can develop skills to translate their knowledge into practice of safer sex.

2.6 Conclusion

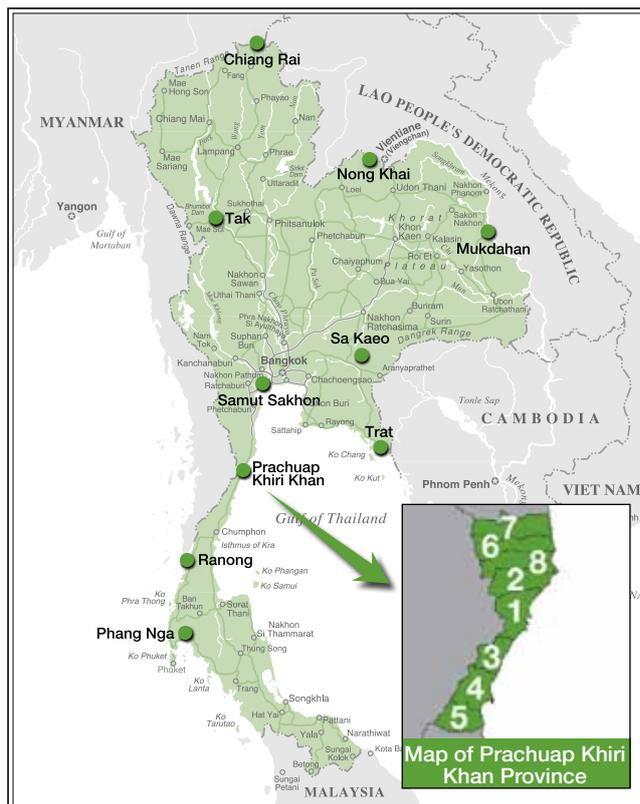
Due to the limited information and the challenges in accessing data, the triangulation for Trat Province was very difficult to implement. Similar to Samut Sakorn Province, the HIV and STIs prevalence in migrant sex workers and pregnant women suggests that the transmission could be worse if there is no immediate action to scale up the HIV/AIDS programmes. Future prevention programmes should expand to cover female migrants and other migrant groups outside of fishing and related businesses such as, 'labourers', factories and agricultural farms. Future prevention programmes should also focus on the message of condom use as a universal health message. There is a need to learn more about migrant groups outside of the fishing business and identify their HIV/AIDS vulnerabilities and how to address them. It is also important to take into consideration that Trat Province is a transit centre for Cambodian migrants and therefore an innovative approach is needed to deliver HIV/AIDS programming for this context.

3. Prachuap Khiri Khan Province

Prachuap Khiri Khan is 212 kilometers long and narrow coastal province leading to the South of Thailand. To the west of the province it borders the Tanintharyi Division of Myanmar. Currently there are more than 30 routes, some navigable by car that connects Thailand with Myanmar. Prachuap Khiri Khan consists of eight districts: (1) Muang Prachuap Khiri Khan, (2) Kui Buri, (3) Tap Sakae, (4) Bang Saphan, (5) Bang Saphan Noi, (6) Pran Buri, (7) Hua Hin, and (8) Sam Roi Yot.

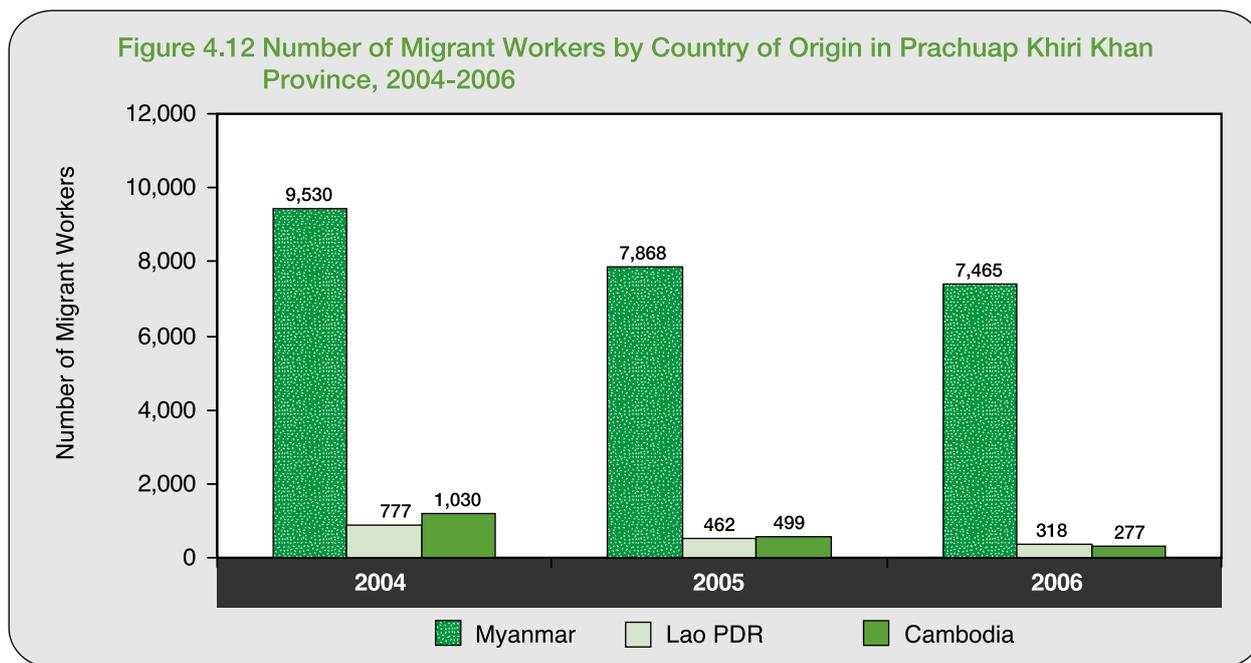
Singkhon in Muang Prachuap Khiri Khan District is the major checkpoint of the province and is often bustling with border trade, especially on the weekends.

Besides being a luxury beach resort, Prachuap Khiri Khan Province is well known for pineapple and coconut growing, as well as rubber plantations. A lot of agricultural processing factories are established in the province such as fruit and fish canning, coconut and palm oil processing. Pran Buri District has many fruit plantations and other agricultural farming so there are a lot of fruit canning factories in the district whilst in Bang Saphan District there are many rubber plantations. The province aims to be the leader in pineapple processing, producer and export of high quality steel and also a destination for family recreation and health tourism. In 2004, the Provincial GPP stood at 39,726 million Bahts. Manufacturing led the non-agriculture sector with 25.9% share, followed by the agriculture sector (22.0%), wholesale and retail trade (17.8%) and hospitality and/or recreation services (14.7%). Three districts that have ports for fishing are: Pranburi, Bang Saphan and Muang however, during the monsoon season many big fishing boats have to sail to the South or East of Thailand to find fish.



3.1 Migrant Demography

Workers from Myanmar make up the largest group of migrant populations in Prachuap Khiri Khan Province, accounting for 89% of registered migrants in 2005, which increased to 92% in 2006. The proportion of migrant workers from other countries, especially Cambodia, reduced in 2005 and continued to decrease in 2006 (Figure 4.12).



Source: Prachuap Khiri Khan Provincial Office

The districts with the largest migrant populations are Bang Saphan, Pran Buri, Muang and Hua Hin (Table 4.8). Lao migrant workers are more likely to work in Hua Hin than other districts, while the majority of Cambodian migrant workers are employed in Pran Buri and Bang Saphan Districts.

Table 4.8 Distribution of Registered Migrant Workers by District and Country of Origin in Prachuap Khiri Khan Province, 2005

Country District	Muang	Bang Saphan	Pran Buri	Hua Hin	Bang Saphan Noi	Kui Buri	Thap Sakae	Sam Roi Yot
Cambodia	18	135	262	32	11	0	26	15
Lao PDR	24	18	66	173	58	31	4	88
Myanmar	1,030	2,163	1,698	752	831	661	441	292

Source: Prachuap Khiri Khan Provincial Office of Employment

According to 2005 statistics, the majority of migrant workers (31.4%) were employed as agricultural workers followed by fishermen (16.1%) and seafood processors (9.3%) (Table 4.9). The employment trend in 2004 and 2006 shows the proportion of Myanmar migrant workers shifted from the fisheries sector to the factory sector. There was a significant increase from 10% of all Myanmar migrants in 2004 to 22% in 2006. Migrants from Lao PDR are mostly agricultural workers (approximately 70%) and most migrant workers from Cambodia are fishermen or workers in seafood processing (70-88%). Many Cambodian migrants can also be founded in construction work which accounts for almost 15% in 2006, a big shift from about 3% in the previous two years.

Table 4.9 Proportion of Migrant Workers in Prachuap Khiri Khan Province by Occupation and Country of Origin, 2004-2006

Occupation	Myanmar Worker			Laos Worker			Cambodian Worker		
	2004	2005	2006	2004	2005	2006	2004	2005	2006
Fisheries	34.8	25.4	18.3	5.9	6.7	0	88.3	82.0	70.8
Agriculture and Livestock	36.2	38.5	39.4	74.3	68.6	72.6	3.7	5.6	3.2
Construction Work	6.7	7.9	8.0	1.4	2.8	1.3	3.4	3.4	14.8
Factory Work	10.0	15.2	21.8	1.4	2.2	6.0	0.3	0.2	2.9
Domestic Work	2.7	2.8	2.9	8.2	12.1	7.2	1.7	2.0	1.4
Shopkeeping	4.4	4.5	3.8	4.0	4.8	6.9	0.7	0.8	1.4
Others	5.2	5.7	5.7	4.8	2.8	6.0	1.9	6.0	5.4

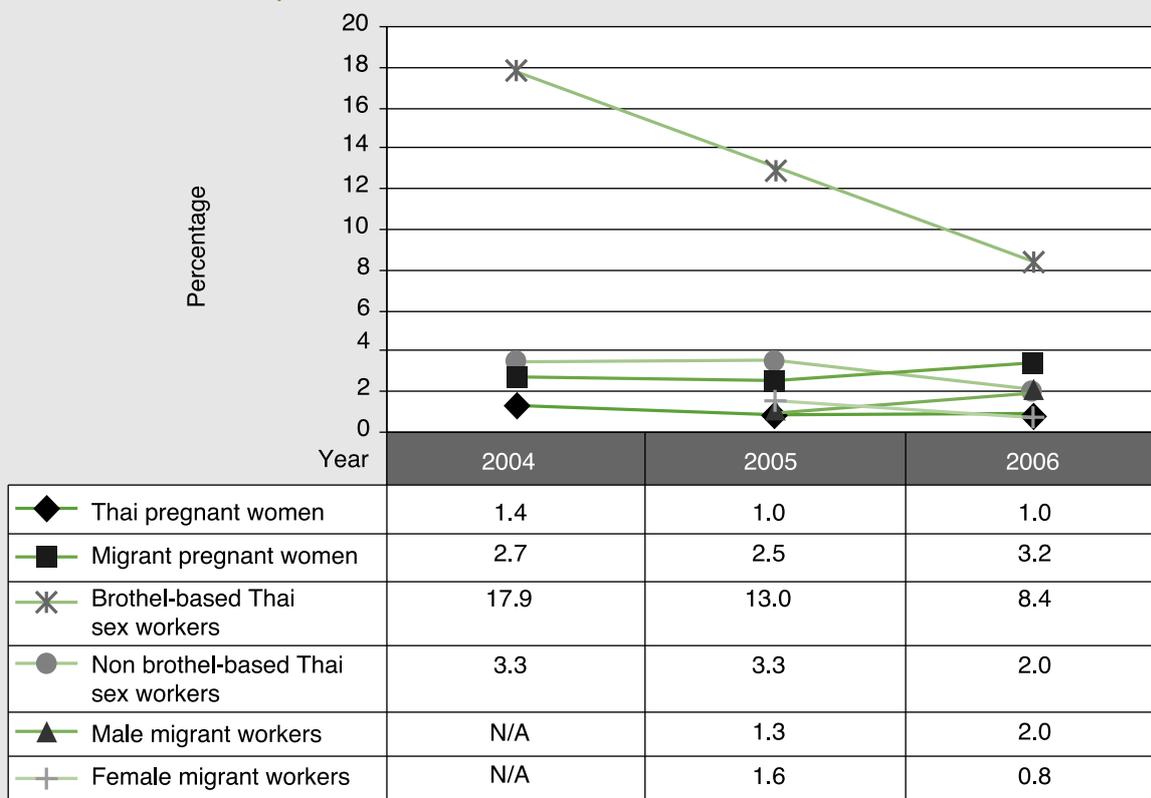
Source: Prachuap Khiri Khan Provincial Office of Employment

Female migrants made up about one-third of the total registered migrant workers. Females accounted for less than 33% of the migrants from Myanmar, while the proportions of male and female migrant workers from Lao PDR were equal. Among the Cambodian migrant workers there were few women working in this province with less than 100 women during each year of the study.

3.2 HIV/AIDS and STIs Situation

In 2005 Prachuap Khiri Khan Province started conducting HIV sentinel surveillance among migrant workers who were receiving medical examination as part of their work permit application. In 2006 sentinel surveillance among migrant fishermen was also conducted. HIV infection rates in both Thai and migrant pregnant women groups were relatively high (over 1%) but in comparison to Thai pregnant women, the migrant pregnant women had much higher infection rates over three years. HIV infection rate among migrant pregnant women in 2004 was nearly twice as high than the rate in Thai pregnant women (1.4% v.s. 2.7%). In 2006 this rate increased to slightly more than three folds higher (1.0% v.s. 3.2%). HIV prevalence in male migrant workers slightly increased from 1.3% in 2005 to 2.0% in 2006 and for female migrant workers the rate significantly dropped by half from 1.6% in 2005 to 0.8% in 2006 (Figure 4.13).

Figure 4.13 HIV Sero-prevalence among Various Groups of Thai and Migrant Populations in Prachuap Khiri Khan Province, 2004-2006

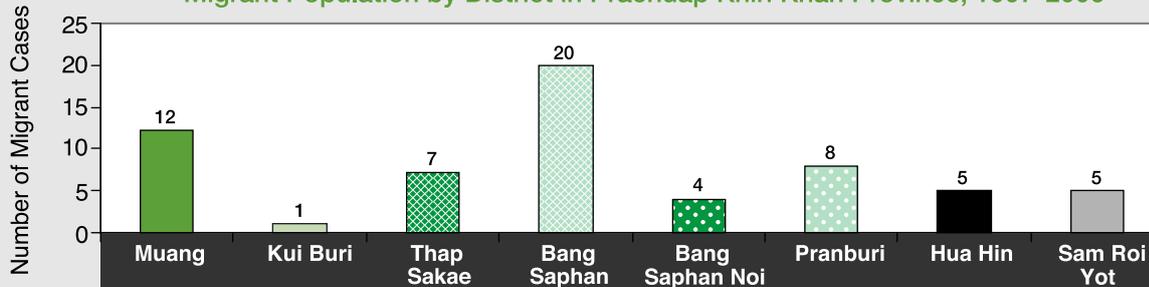


Source: Prachuap Khiri Khan Provincial Health Office, HIV Sentinel Surveillance Report

The infection trend among Thai sex workers seems to have improved because HIV prevalence in this group has continuously reduced, particularly among brothel-based sex workers. Although the HIV rates among brothel-based sex workers have gradually reduced from 17.9% in 2004 to 8.4% in 2006 this rate is still considerably high.

Areas that have the highest reported migrant cases of symptomatic HIV/AIDS since 1997 were Bang Saphan District (20 cases), Muang Prachuap Khiri Khan District (12 cases), Pran Buri District (8 cases) and Thap Sakae District (7 cases). There is no documentation available which details the occupational categories in which the migrant HIV cases are employed (Figure 4.14).

Figure 4.14 Accumulated Number of Reported HIV Symptomatic and AIDS Cases among Migrant Population by District in Prachuap Khiri Khan Province, 1997-2006



Source: Prachuap Khiri Khan Provincial Health Office

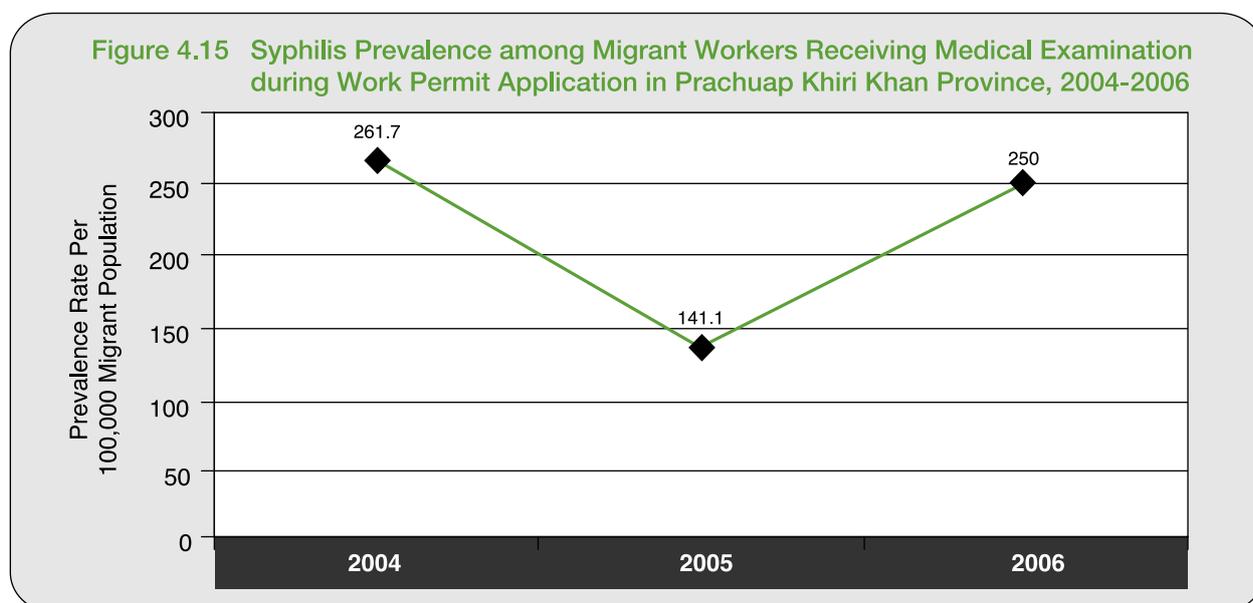
Table 4.10 indicates that nearly half of the foreign HIV/AIDS symptomatic cases were from Myanmar. It is unknown if those categorized as “others” were ethnic populations from other parts of Thailand or migrants from Myanmar but, they were the second largest group of reported migrant cases. If the latter is the case, then it means Myanmar migrants make up the vast majority of HIV/AIDS symptomatic cases among migrants in the province. The other second largest group of the reported migrant cases were Cambodians (19.4%). It is also interesting to note that approximately 10% of the symptomatic HIV/AIDS cases were Chinese but it is unknown what type of migrants they are and how their HIV status ended up being identified in this province.

Table 4.10 Reported Migrant Symptomatic HIV and AIDS Cases in Prachuap Khiri Khan Province by Ethnicity, 1997-2006

Ethnicities	Number of Cases	Percent
Burmese	32	47.8
Cambodian	13	19.4
Chinese	7	10.4
Vietnamese	2	3.0
Karen and others	13	19.4
Total	67	100

Source: Prachuap Khiri Khan Provincial Health Office

The STIs data for migrant populations lacked systematic reporting and maintenance and was difficult to compile the information needed from the various levels of health facilities. The only available source for data collecting was the database of medical examinations that migrant workers applying for work permits had to undergo. From the data, it indicated that the recent prevalence of syphilis in migrant workers fluctuated as the prevalence drastically decreased from 261.7 per 100,000 populations in 2004 to 141.1 in 2005 and bounced back to 250 per 100,000 populations in 2006 (Figure 4.15).



Source: Prachuap Khiri Khan Provincial Health Office

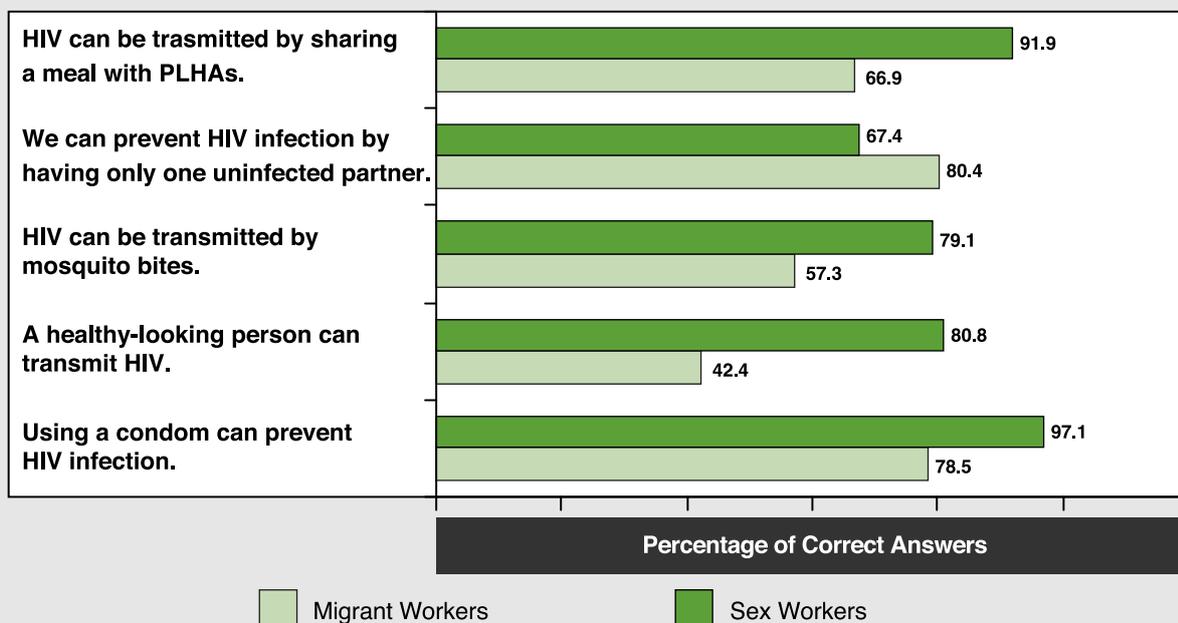
3.3 HIV Vulnerabilities and Risks

From the 2004 PHAMIT survey it indicated that the awareness of condom use, especially in transactional sex among migrant men from Myanmar was quite high. The survey results also showed that 94% used condoms with sex workers, but none with non-regular partners. Their exposure to HIV/AIDS programme interventions has been very low at only 1%.

The recent surveys also show that migrant workers had very limited HIV/AIDS knowledge and awareness. The majority of survey samples by Myanmar migrants (67.3%) working in seafood factories and other fishing related businesses did not know about HIV/AIDS (Prachuap Khiri Khan PHO, 2006). Most of them had never used a condom and only 2.7% reported they always used condoms when having sex and about one quarter had an HIV testing. In 2007 the PHO conducted a survey with 413 migrant workers in five districts and found that the majority has heard about HIV/AIDS and had good general knowledge of HIV/AIDS. The migrants from the survey had learned about proper condom use from the media (85.5%) but, actual condom use rate was less than 10% and approximately 29% had received an HIV test.

The BSS demonstrates different levels of HIV/AIDS knowledge among sex workers compared to migrant workers. Sex workers tend to have higher levels of HIV knowledge and prevention practices more so than migrant workers (Prachuap Khiri Khan PHO, 2006). For example, only 42.4% of migrant workers knew that a 'healthy looking person can pass on HIV to others' as compared to 80.8% among sex workers (Figure 4.16). Condom use in the last sex with general customers and irregular customers were constantly high and slightly increased from 92.1% and 92.6% in 2005 to 94.5% and 93.8% in 2006 respectively. However when it comes to condom use with 'regular' partners, the use of condoms were much lower at 56.8% in 2005 and this further decreased to 51.4% in 2006.

Figure 4.16 HIV/AIDS Knowledge in Migrant Workers and Sex Workers in Prachuap Khiri Khan Province, 2005-2006



Source: Prachuap Khiri Khan Provincial Health Office, Behavioural Surveillance Survey, 2005-2006

3.4 Responses to HIV/AIDS in Migrant Population

Gathering information on HIV/AIDS programme implementation in Prachuap Khiri Khan Province is scarce. In fact, Prachuap Khiri Khan is new in HIV/AIDS work with migrant populations. Presently, there is only one HIV/AIDS project that is a PHAMIT project implemented in the province by an NGO in collaboration with Prachuap Khiri Khan PHO. PHAMIT focuses on two specific port areas of Pran Buri District, mainly targeting fishermen, seafood processors and sex workers. PHAMIT's activities in Prachuap Khiri Khan can be summarized in Table 4.11 below.

Table 4.11 HIV/AIDS Programme Implementation for Migrant Population in Pran Buri District of Prachuap Khiri Khan Province, 2006

Programme Interventions	PHAMIT Project
Outreach activities covered	- 2,208 migrant fishermen and seafood processors from Cambodia and Myanmar - 113 Thai service workers of Karaoke bars
Condom distribution	11 condom outlets established
HIV/AIDS and STIs treatment and care	Limited
Mobile health service	79 times
Capacity Development of Migrant Health Workers	33 migrant health volunteers 46 peer leaders

Source: Prachuap Khiri Khan PHO

3.5 Discussion and Recommendations for Prachuap Khiri Khan Province

Although the STIs/HIV/AIDS related information among migrants in Prachuap Khiri Khan Province is very limited there can be some discussions and recommendations made to improve Provincial HIV/AIDS Programme as follow.

Data collection, management and use

Similar to other provinces, the STIs/HIV/AIDS surveillance and reporting systems should be strengthened to provide better empirical data to identify the needs of the various migrant groups. Fishermen and sex workers are recognized to be the high risk groups in Prachuap Khiri Khan Province but these are not the sectors where the majority of migrants work. STIs/HIV/AIDS information on other migrant work sectors such as, agriculture and factories where majority of migrant workers are employed is limited. Therefore, it is not concrete to judge the appropriateness of programme activities that focus on migrants in fishing and related businesses. The Chinese HIV/AIDS symptomatic cases contribute to 10% of migrant cases, but unfortunately their characteristics are unknown. Additional HIV/AIDS related biological and behavioural data and STIs data for all migrant groups in the province is urgently needed for future programming to maintain the current low prevalence status of the province.

STIs/HIV/AIDS situation and programmatic responses

One of the benefits of the surveillance system for migrants in Prachuap Khiri Khan Province is that it is able to track the nationalities and ethnicities of migrant HIV/AIDS symptomatic cases. The majority of migrants in the province are from Myanmar (about 90%), and nearly half (48%) of the symptomatic cases reported in the province were Myanmar migrants. When taking into consideration that half of the symptomatic migrant cases from the "Karen and others" category are migrants from Myanmar and if this is combined

with the proportion of Myanmar cases it indicates that more than half (58%) of the total migrant HIV/AIDS cases were of Myanmar origin. Given that Cambodian migrants are 6.1% of the migrant population (range from 9.1-3.5% in 2004-2006) yet, almost 20% of the symptomatic migrant cases in Prachuap Khiri Khan Province are Cambodian. The data indicates that the prevalence of HIV/AIDS symptomatic cases among Cambodian migrants is much higher than the prevalence among Myanmar migrants. This conclusion however, is based on the assumption that the proportions of unregistered Myanmar and Cambodian migrants in the province are similar to those of the registered migrants.

The PHO report states the top three districts with highest numbers of migrant HIV/AIDS symptomatic cases to be Bang Saphan, Muang Prochuap Khiri Khan, and Pran Buri. This order is also similar to the three districts with highest numbers of migrant populations. Once again the occupation of the migrant cases is unknown for these three districts. The districts have seaports and most of the employees are Cambodian migrants working in the fishing sector. There are less than one-third of migrants employed in fishing and related businesses. Other big business sectors in Bang Saphan and Pran Buri Districts are rubber plantation and canned food factories. The data collated show that the majority of migrants are employed in agricultural sector (about 38% over the years) and factories (4-10% over the years). It would be premature to conclude which sectors migrants work in are at a higher risk than other sectors. According to the demographic data, HIV/AIDS programme service need to expand and include migrants in other labour sectors (i.e. agriculture and factories) and, explore the HIV/AIDS related data and specific needs among these migrant groups.

According to the available data, HIV infection rates among male migrants in Prachuap Khiri Khan Province increased from 1.3% in 2005 to 2.0% in 2006 but, these rates are relatively low in comparison with other border provinces in this study. The HIV infection rate in migrants within this province is higher than the Thai population for both men and women. The data from migrant medical examinations collated in the annual registration show that the syphilis infection rate among registered migrants was doubled from 141 to 284 per 100,000 populations in 2005 and 2006. Based on the fact that only those registered in 2005 were allowed to renew their registration in 2006, it is quite clear that the migrant population tested in 2005 was the same cohort as the group tested in 2006. If there were migrants who did not register in 2005 but underwent the medical examination in 2006 (which is very unlikely) the number of the migrants would be very minimal since the total number of registered migrants decreased. It can therefore be concluded that a big proportion of migrants who tested positive for syphilis in 2006 were newly infected cases from the past 12 months. In theory, registered migrants are not allowed to leave their documented area except for seafarers who may need to dock at different ports due to nature of their work. The occupation of the migrants who tested positive for syphilis was unclear but a small number were seafarers and it is very likely that many of the cases were infected locally.

In 2004 PHAMIT conducted a survey of Myanmar migrant fishermen and those in other related sectors. The survey showed that most of the migrants used condoms with sex workers but none of them did so with their casual sex partners. In addition, the PHO surveys in 2006 and 2007 reported that less than 10% of the surveyed migrants used condom. Both PHAMIT and the 2006 PHO surveys reported that most migrants had never heard about HIV/AIDS. The evidence suggests there is an urgent need to reach as many migrants in all the sectors to maintain the relatively low HIV prevalence rate among migrants in this province. To support this recommendation, further evidences are provided below.

According to the PHO survey from 2007, the majority of migrants (85.5%) learned about condom use from the media. Mass media is effective for disseminating information to a wide audience but, it is difficult for one to develop condom use skill through the information obtained through mass media. The PHAMIT survey from 2004 stated only 1% of migrants were exposed to the HIV/AIDS programme's BCC activities. This 1% coverage is only approximately 1,100 migrants in the province during 2004 and this does not

take into account unregistered migrants who normally are estimated to be two to four times larger than registered migrants. According to the PHAMIT data more than 2,200 registered and unregistered migrants in the province were reached by the project in 2006. The programme coverage was an improvement to 2004 but the migrants reached are very small given the size of the migrant population in the province. It is fair to conclude that the programme may have achieved very limited outcome and impact.

Since one-third of the registered migrants are female it is also important to look into their HIV/AIDS status and needs for prevention, care and treatment. HIV infection rate among female migrants decreased by half from 1.6% in 2005 to 0.8% in 2006 but, the rates in pregnant migrant women were high between 2004 and 2006 (2.5-3.2%). The HIV infection rates among pregnant migrant women were also about two to three times higher than the pregnant Thai women. From the data the HIV infection among migrant women is not high but, their lack of knowledge and limited opportunity to prevention activities is important to ensure female migrants' vulnerabilities to HIV infection is reduced.

The HIV infection rate in Thai sex workers in Prachuap Khiri Khan Province continued to improve because the rate gradually reduced from 2004-2006. However, it is important to closely monitor the situation since the rate among brothel-based sex workers (8.4% in 2006) is high. The BSS data by PHO in 2005-2006 showed that more than 90% of migrant sex workers reported condom use in the last sex with their clients. This data result is consistent with the results from the PHAMIT and PHO surveys on condom use in the last sex with sex workers among male migrants. Although the BSS also reported an improvement in HIV related knowledge and prevention practices among sex workers, a little more than half of them used condoms with regular partners.

The information obtained from migrant women, pregnant migrant women, and Thai sex workers strongly suggests the importance of HIV/AIDS programme services for females including the health message of universal condom use with all types of partners.

3.6 Conclusion

The experience in HIV/AIDS programming for migrants in Prachuap Khiri Khan Province is currently minimal. It is however, positive to see both government and non-government organizations start to make an effort to work with migrants in the recent years. Similar to other provinces, there is the need to strengthen the data collection and management particularly integrating the STIs data for migrants to HIV/AIDS surveillance system to ensure the comprehensiveness and accuracy of the data.

Fishermen and sex workers are recognized to be a high risk group of HIV infection by programme implementers but actually the majority of migrants in the province are in the agricultural and factories sectors. Bang Saphan District which is known to host a large number of migrant agricultural workers had the greatest number of HIV symptomatic and AIDS cases. However, there seems to be few or no HIV/AIDS related activities implemented in this district and the existing programme focuses its efforts in two specific seaports of another district. Further investigation should be made to ensure the limited resource is maximized and target the most at risk groups in the appropriate geographical area.

HIV prevalence trends continue to remain constant among migrant women and men, as well as in Thai sex workers. Recent surveys reported low HIV/AIDS knowledge and unsatisfactory levels of condom use practices among the high risk groups. In addition, there is a high prevalence of syphilis in migrant workers and if they were to engage in unprotected sex it might lead to HIV transmission. Having an STI is a key factor and a higher risk for contracting HIV. Therefore, it is crucial for local authorities to strongly respond to the situation in order to prevent any infections and sustain the low prevalence rates.



4. Phang Nga Province

Phang Nga is a coastal province with a 240 kilometer coastline along the Andaman Sea. Phang Nga consists of 105 islands and is endowed with fertile land and beautiful seascape. The province is divided into eight districts: (1) Muang Phang Nga, (2) Ko Yao, (3) Kapong, (4) Takua Thung, (5) Takua Pa, (6) Khura Buri, (7) Thap Put, and (8) Thai Muang. Phang Nga's urban areas are around Muang and Takua Pa Districts.

The group of provinces in the Andaman, including Phuket and Phang Nga, is renowned as the hub of world class travel. Phang Nga positions itself as the world's leading ecotourism destination and the most advanced agricultural area in the Andaman. Upon reviewing major sources of income in 2004, Phang Nga's economy was mostly agriculture-based. This sector accounted for 12,054 million Bahts or 53.7% of the province's GPP. Key contributors to this sector are palm oil and rubber products. Income from fishery accounted for 12.2% of the GPP while income from hospitality services was 899 million Bahts or only 4% of the GPP.

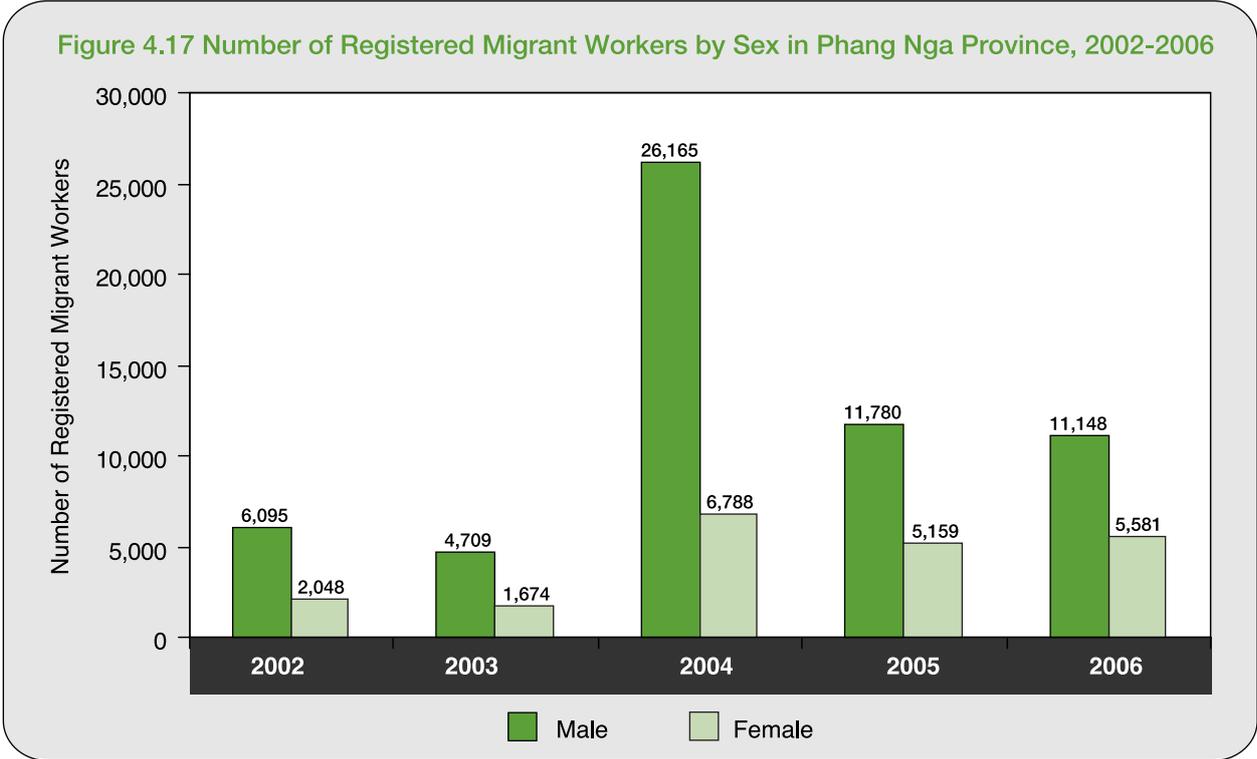


Most factories in Phang Nga Province are located in Takua Pa and Thai Muang Districts. They are small and have less than 10 million Bahts GPP per capita. Key manufacturing that contributes significantly to the province's GPP is the production of plywood and particle board.

4.1 Migrant Demography

Nearly all (99%) of migrant workers in Phang Nga Province are from Myanmar. They came to Phang Nga through Ranong Province where accessing the border can be done via land or sea quite easily. Migrants can also travel by boat from Kawthaung Township of Myanmar to Khura Buri District or Baan Nam Khem in Takua Pa District of Phang Nga before moving on to other provinces (Office of the National Economic and Social Development Board, 2007). Archavanitkul et al. reported that various ethnic groups have diverse and unique preferences for employment and lifestyle. Mon migrants prefer to work and stay in rubber plantations, whereas Myanmar migrants tend to work in the fishing or construction industries where the standard of living is poor.

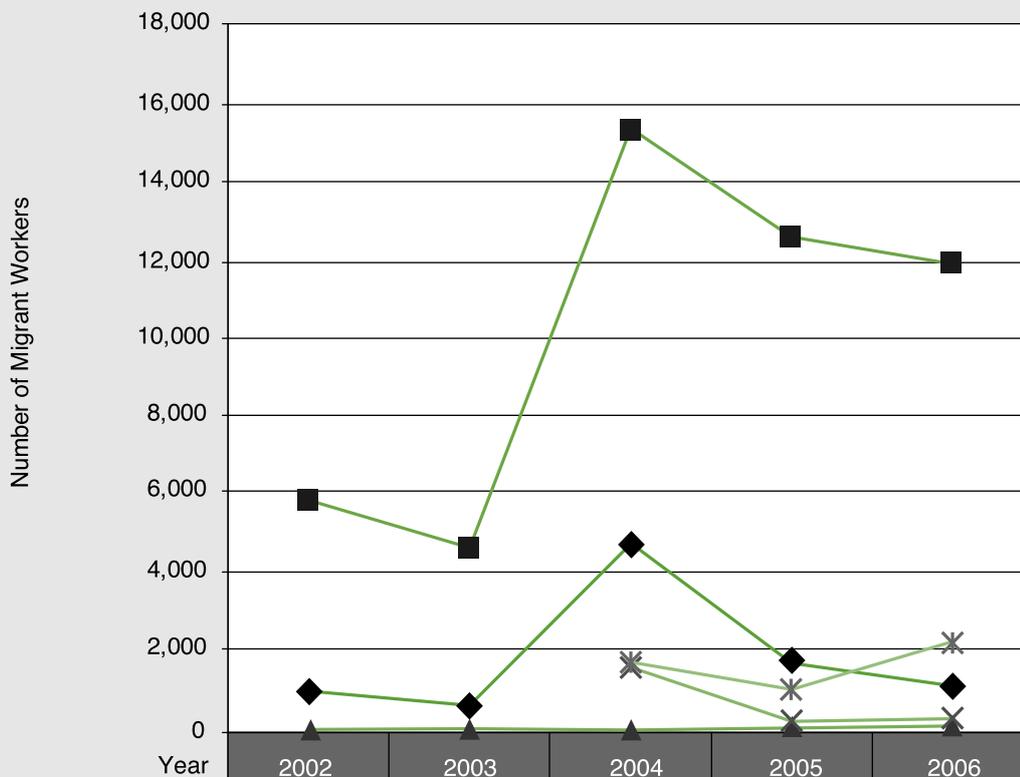
The number of working migrants residing in Phang Nga Province reduced to less than half between 2004 and 2005 (Figure 4.17). There were less than 17,000 migrant workers granted work permits in Phang Nga in 2005 and 2006 (Phang Nga Employment Office, 2008), compared to almost 33,000 workers in 2004. This might be because of the impact of the tsunami disaster at the end of 2004 that made more of an impact on the coastal areas of Phang Nga Provinces than other provinces in Thailand. It is observed that the proportion of female migrants employed in the province has gradually increased, with a male:female ratio of 1.99:1 in 2006 compared to 2.98:1 in 2002.



Source: Phang Nga Provincial Office of Employment, Ministry of Labour and Social Welfare

Figure 4.18 demonstrates the key occupations employing migrant workers in Phang Nga Province between 2002 and 2006. According to these official statistics, Myanmar migrants populated the agricultural sector more than other sectors. Migrant workers from Lao PDR, although constituting a small number, were noticed to have slightly increased between 2002 and 2006. Migrant workers from Cambodia are scarce in this province. Districts which mostly hire migrant workers in the farms and plantations include Thap Put, Ka Pong and Ko Yao, whereas other districts such as Takua Thung, Takua Pa, Khura Buri and Thai Muang, are populated with migrants working in the fishery industries.

Figure 4.18 Number of Registered Migrant Workers by Occupation and Country of Origin in Phang Nga Province, 2002-2006



Year	2002	2003	2004	2005	2006
◆ Myanmar Migrants in Fishery Industry	1,086	652	4,888	1,750	1,351
■ Myanmar Migrants in Agricultural Sector	5,844	4,827	15,543	12,460	11,983
▲ Lao Migrants in Agricultural Sector	1	11	9	48	58
× Myanmar Migrants in Domestic Work	N/A	N/A	1,689	122	244
* Myanmar Migrants in Construction Work	N/A	N/A	1,778	1,251	2,138

Source: Phang Nga Provincial Office of Employment, Ministry of Labour and Social Welfare

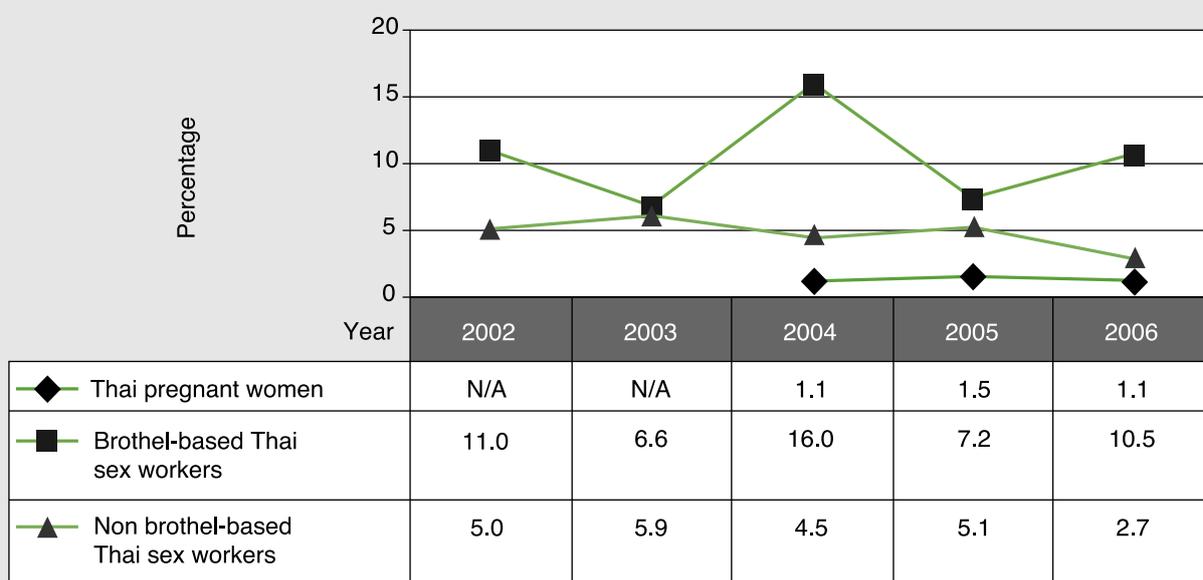
As a result of the severe hit from the 2004 tsunami disaster in Thailand, Phang Nga’s economy and infrastructures were still recovering from the devastating impacts at the time of this report. The data in Figure 4.18 suggests that the tsunami may have had a strong impact on many business sectors of Phang Nga as well as on migrant workers. The effect is clearly observed in the fishing industry where a lot of fishing boats were damaged, resulting in a significant reduction of employed migrant workers in this sector between 2005 and 2006. On the other hand, recent efforts in economic development and restoration programmes have led to a high demand in the construction of buildings, hotels and housing in the affected areas. As a result, demands for construction workers are greater in 2006. Another example is noted in the domestic work sector. During 2004, there was a high demand for domestic workers in the province with 1,689 migrants employed in this sector. In 2005, following the tsunami, the number was significantly reduced to 122 registered workers in this sector before increasing to 244 in 2006.

4.2 STIs/HIV/AIDS Situation

Phang Nga Province has not yet pursued the HIV sentinel surveillance within their migrant population. In addition, HIV/AIDS research within migrants in Phang Nga is still far from sufficient.

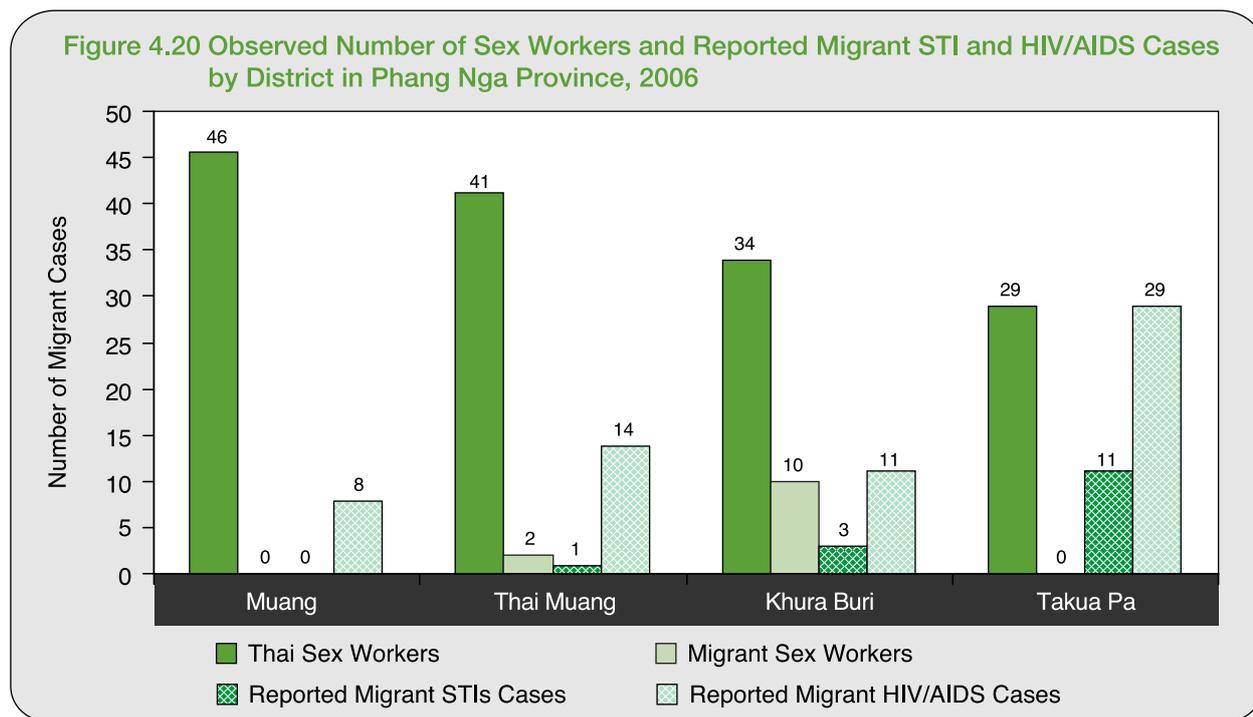
Similar to other provinces, an annual sentinel surveillance survey among some specific Thai populations is routinely conducted as shown in Figure 4.19. According to this survey, HIV infection among pregnant women has remained steady in the past three years. However, infection trends in sex workers, and in particular brothel-based sex workers, are alarming. These have fluctuated since 2002 between 6 and 16% while the rates in non-brothel based sex worker groups have been much lower at 3-6%. This strongly suggests that Phang Nga needs to put an immediate effort into HIV/AIDS programmes, which at the moment are insufficient.

Figure 4.19 HIV Sero-prevalence among Thai Pregnant Women and Sex Workers in Phang Nga Province, 2002-2006



Source: Phang Nga Provincial Health Office, HIV Surveillance Survey Report

The high HIV prevalence observed in sex workers suggests a need to explore the situation in more detail. Phang Nga PHO reported in its 2006 survey that migrant sex workers were rarely found in entertainment areas (only 12%). They were present much more in the areas of Takua Thung (58.8%) and Khura Buri Districts (22.7%), but not many in Thai Muang (4.7%) or the rest of the province. Figure 4.20 somewhat demonstrates a consistency in the number of STIs and HIV/AIDS cases in the studied districts. Takua Pa District had the greatest number of both STIs and HIV/AIDS cases, while Muang Phan Nga District had no STI cases, and the lowest number of HIV/AIDS reported cases.



Source: Phang Nga Provincial Health Office

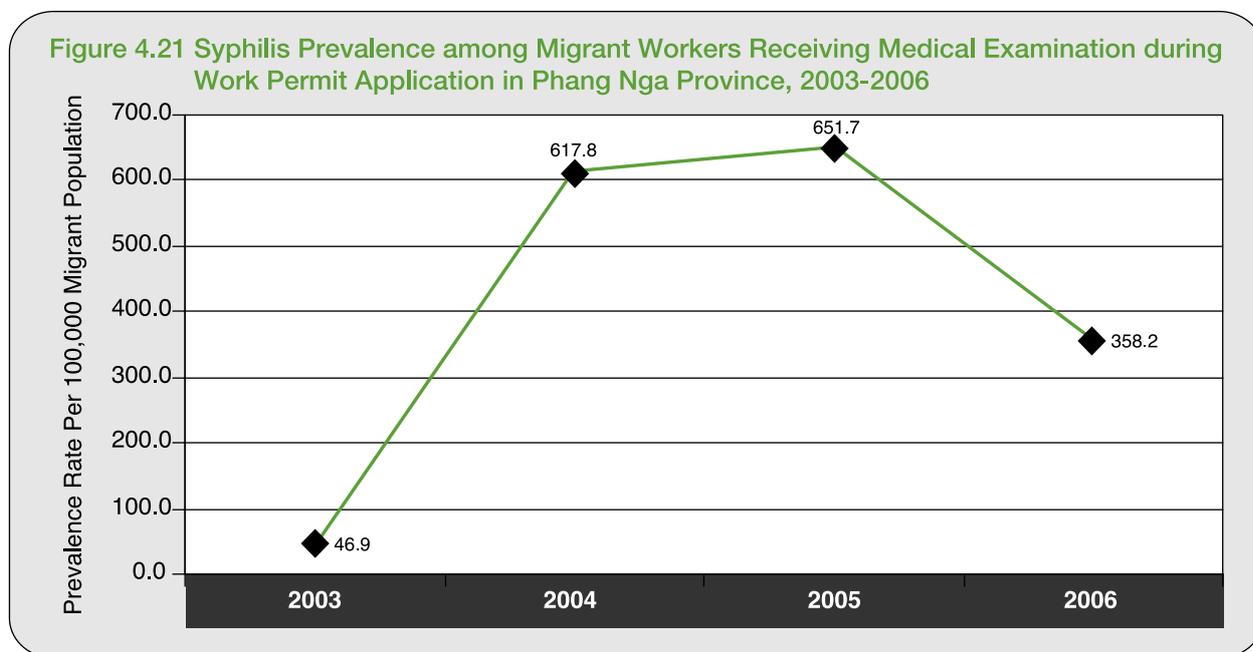
Most of the HIV symptomatic and AIDS cases reported among migrant populations in Phang Nga Province were Myanmar migrants. An official report on HIV symptomatic and AIDS cases as of March 2008 stated that female migrants accounted for one-third of the total reported cases. The report concludes that the majority of HIV symptomatic/AIDS cases were migrant labourers (84%), followed by fishermen at only 8%. Given this evidence, it is likely that migrant groups other than fishermen are also at high risk of HIV transmission. However the report in Table 4.12 illustrates that HIV symptomatic/AIDS cases were prevalent in the districts of Takua Pa, Thai Muang and Takua Thung, all of which are recognized as seaport towns. Like other provinces, there is a lack of information available to clarify this issue. Kapong was reported to have the highest number of positive cases among non-fishing areas.

Table 4.12 Reported HIV Symtomatic and AIDS Cases in Myanmar Migrants in Phang Nga Province by District, as of March 2008

District	Accumulated Cases
Takua Pa	26
Thai Muang	17
Takua Thung	24
Muang	3
Khura Buri	6
Thap Put	2
Kapong	7
Ko Yao	2
Total	87

Source: Phang Nga Provincial Health Office, 506/1 and 507/1 Reports

STIs among migrant populations in Phang Nga are anticipated to be high, given the evidence discovered from the results of the annual migrant medical examination. As shown in Figure 4.21, the syphilis infection rate among registered migrants jumped from 46.9 to 651.7 per 100,000 migrant populations in 2003 and 2005. Although the rate decreased in 2006, it is still much higher than the first round of examinations reported in 2003.



Source: Phang Nga Provincial Health Office

4.3 HIV Vulnerabilities and Risks

It is worth noting that working with migrant populations on HIV/AIDS is a new experience for Phang Nga Province. Only a few studies have been conducted to date, and the information regarding the HIV/AIDS epidemic and the risks and vulnerabilities related to the mobile population in this province are scarce.

In PHAMIT's 2004 baseline survey results, the proportion of condom use in the last sexual encounter with sex workers and non-regular partners among Myanmar migrant men was 78.6% and 22% respectively. Phang Nga Province claimed to have lower condom use practice among migrant populations in comparison to other target provinces. The migrant respondents of this province also had the lowest level of exposure to HIV/AIDS education after those in Prachuap Khiri Khan Province. Only 13% of respondents reported to participated in any HIV/STIs campaigns and less than 6% were exposed to condom education sessions.

A recent behavioural survey among 360 Myanmar migrant workers in Khura Buri District (Rungruengroj, 2006), revealed that one in every 10 had experienced sex with sex workers. About one quarter reported using condoms during casual sex but few had consistently used condoms, and 66.7% said they sometimes used condoms.

4.4 Responses to HIV/AIDS in Migrant Population

As mentioned earlier, Phang Nga Province only recently started implementing HIV/AIDS programmes among migrant populations. Therefore, relevant information on migrant populations remains limited. It is said that the response to HIV/AIDS among migrant populations in Phang Nga Province increased after the tsunami. Because of the observed rise in HIV/AIDS infection, many NGOs, who initially came to

work in the province on the tsunami relief and recovery programmes, later expanded their programmes to concentrate more on HIV/AIDS. The implementation of such programmes is found mostly in the tsunami affected port areas in Takua Pa, Takua Thung and Thai Muang Districts. According to the migrant registration data, migrant workers from Myanmar make up the majority in the agriculture and construction sectors. At the time of this study, only one NGO is reported to work with migrant construction workers and agriculturists, whereas many tend to implement their programmes with migrant seafarers and seafood processing workers.

According to annual mapping conducted by the IOM-MOPH Migrant Health Programme in four seaport towns of Phang Nga Province between 2006 and 2008, there were slightly more than 5,000 migrants living and working in the areas, including migrant seafarers who lived on fishing boats. However, 2006 data and information gathered from various local stakeholders for this study estimated that the migrant population in the three seaport districts of Phang Nga, where current HIV/AIDS programmes are intensively implemented (i.e., Takao Pa, Takao Thung and Thai Muang), could be as high as 40,000 people since there are many migrants working in other sectors outside of the fishing industry in these seaport districts. Assuming that the estimated migrant population were real, only a small proportion of the migrant population in these three districts were reached through outreach and BCC activities in 2006 (Table 4.13).

Table 4.13 HIV/AIDS Programme Reach for Migrant Population in Phang Nga Province, 2006 (Only Takua Pa, Takua Thung and Khura Buri Districts)

Category	Number / Quantity
Number of Registered Migrant Workers	Data Not Available
Estimated Number of Migrant Population	40,000
Number of Migrants reached through Outreach for BCC	4,641
Number of Migrants Received HIV Counseling and STIs Treatment	938
Number of Migrants Received PMTCT Services	286
Number of Migrants Received ART	16
Number of Migrants Received Home Visit Services	141
Number of Migrants Received Psychosocial Support	781
Number of Migrants Participated in PLHA Self-help Group	20
Number of Migrant Health Volunteers	678
Number of Condom Distributed (pieces)	63,212

Source: *Phang Nga Provincial Health Office, MAP Foundation, WVFT, Saint Camillus Foundation of Thailand, MSF, and the Foundation of Education and Development*

4.5 Discussion and Recommendations for Phang Nga Province

Because of the insufficient information on STIs/HIV/AIDS in diverse migrant labour sectors, it is difficult to discuss the findings in detail to provide specific recommendations for different migrant groups. However, the overall discussion and recommendations drawn upon from findings in Phang Nga Province can be made as follows.

Data collection, management and use

Although migrants, mostly from Myanmar, have been in Phang Nga Province for many years, a majority live and work in the remote agricultural farms and plantations scattered throughout the province which makes their presence in the province less appealing to the authorities and NGOs. Migrant HIV/AIDS

database systems are premature, and, although some STIs data among migrants does exist, the data are not maintained and managed in a systematic way for convenient use. In addition, research about risk and vulnerability to HIV transmission among migrants in this province has not been conducted or systematised in depth. It is strongly recommended that the PHO initiate its HIV sentinel surveillance survey in various migrant groups to explore the situation and appropriately plan for future programmes. It is also recommended that NGOs explore the situation in the agricultural sector where the vast majority of migrants are employed but their STIs/HIV/AIDS situation is unknown.

STIs/HIV/AIDS situation and programmatic responses

The statistics on cumulative migrant HIV/AIDS symptomatic cases in Pang Nga Province, as of March 2008, indicates that a majority of the cases are migrant labourers (84%). As in other provinces, it is unknown which sectors/groups the migrant 'labourers' and the female migrant cases represent. While the reported HIV/AIDS cases among migrants were much higher in Takua Pa, Thai Muang and Takua Thung Districts, it is difficult to conclude if the situations in these districts might be more serious than other districts. Without knowing whether these are the results of the actual situation or due to the fact that there are more NGOs implementing HIV/AIDS programmes in these areas which improve access to VCT and HIV/AIDS care and treatment. Disaggregating the data by year would provide some hints to this issue since most of the NGO programmes on HIV/AIDS began in 2005-2006, following the tsunami relief.

Although Takua Pa and Takua Thung Districts host the major seaports where fishing and related industries are concentrated, the number of migrants employed in these businesses is reported to be much smaller than other sectors. Furthermore, only 8% of the migrant HIV/AIDS symptomatic cases in the whole province were found to work in these sectors. Khura Buri is another seaport district implementing an HIV/AIDS programme for migrants living and working in the seaport town, but the reported migrant HIV/AIDS cases were much smaller than the three districts mentioned above. Because of the direct impacts of the tsunami on the fishing industry, a significant reduction of migrant workers hired in this sector was observed. However, the number of migrant workers hired in construction work increased significantly in response to the physical demand for community recovery. In addition, the annual migrant medical examination for registered migrants in all sectors, the majority of which were in labour sectors other than fisheries, found that syphilis infection rates jumped from 46.9 to 651.7 per 100,000 migrant populations in 2003 and 2005. Although the rate decreased to 358.2 in 2006, it is still much higher than in 2003. Accordingly, the current HIV/AIDS programme focusing on migrant seafarers in selected seaport towns affected by the tsunami might not be sufficient to control the situation. It is important to investigate further the characteristics of migrant HIV/AIDS symptomatic cases reported from these areas as well as other relevant data to inform decisions about whether to target specific migrant groups for future HIV/AIDS programmes in these areas and in the province.

According to the PHAMIT baseline survey in 2004 in Phang Nga Province, about three quarters of male migrants in fishing and related businesses reported condom use in the last sexual interaction with sex workers, despite the low level of exposure to HIV/AIDS campaigns (13%) and condom education sessions (6%) reported in the same survey. It is hard to conclude that migrants could master their condom use practice with such limited exposure to relevant campaigns and education. If condom use rates were not over reported by surveyed migrants, this could imply that respondents may have been exposed to HIV/AIDS programme and condom education sessions outside of Phang Nga Province. This implication is supported by the nature of migrant seafarers who are highly mobile and the only group of migrant labours in Thailand that are legally able to travel out of their registered provinces due to the nature of the fishery industry. Although the level of HIV/AIDS related knowledge is unknown, the reported low levels of exposure to HIV/AIDS activities, the low programme coverage reported by NGOs working in the area in 2006 (about 12%), as well as low level of condom use in casual sex (less than 25%) among PHAMIT

and other surveyed migrants in seaport towns suggests that continuous BCC and other relevant services to this group may be needed.

Although the PHAMIT survey did not report the proportion of migrants who engaged in sex with sex workers and casual sex partners, another survey in Khura Buri District in 2006 reported that a small proportion (about 10%) of male migrants in the seaport town of this district had experienced sex with sex workers. The reported low demand of sex with sex workers might affect the very small number of female migrant sex workers in the whole province (12% of all sex workers) as identified by the PHO in 2006. Despite the report of low demand on sex with sex workers among migrant males, it would be inappropriate to conclude that HIV transmission among sex workers and their male clients in Pang Nga Province is not a concern.

It is unclear who frequents sex workers in Phang Nga Province, and data on HIV prevalence among sex workers could not be disaggregated by nationalities. With the small number of migrant sex workers identified in the province, it is possible that male migrants may also visit Thai sex workers. On the other hand, given that almost 60% of migrant sex workers are concentrated in Takua Thung District, where the size of migrant population is very small, it is also possible that migrant sex workers may have more Thai or clients with other nationalities than labour migrant male clients of the three nationalities. It is worth noting that Takua Pa District had the greatest number of HIV/AIDS cases among migrants. While this district also had the greatest number of STI cases among sex workers, the PHO survey found no migrant female sex worker in the district. It could be assumed that all STI cases among sex workers in this district were Thai. The fluctuating rates of HIV infection in brothel-based sex workers could not only imply a high turnover of sex workers in Phang Nga Province but also that there is a need to further investigate the situation in this group for future programming, particularly regarding cross infection among various bridging populations.

It is also important to note that female migrants contribute to one-third of all reported migrant HIV/AIDS cases, which could reflect the increase in the proportion of female migrants in the province. As there are a very small number of migrant sex workers and less demand for sex workers among male migrants, infections among casual sex and/or migrant couples could be the case. While further investigation should be conducted to better understand the possibility of a second wave of infection among general female migrants, the province needs to urgently establish a proper means to provide appropriate prevention, care, treatment and support services including PMTCT among female migrants.

Finally, there are many NGOs who work on HIV/AIDS and other health-related programmes in Phang Nga Province. Sharing their work and experience on effective strategies, programme achievements and impacts, and the gaps they encounter in programme implementation could contribute to the planning of provincial strategies to tackle HIV/AIDS. Also, their findings could function as a good foundation for HIV/AIDS collaboration and information sharing and assist with establishing effective HIV/AIDS database systems in the province for use in future programming.

4.6 Conclusion

Since Phang Nga Province has not yet pursued HIV sentinel surveillance among the migrant population and relevant research is limited or rarely available, the province is strongly encouraged to urgently place effort into this issue. This is of particular concern considering the relatively high number and existence of diverse migrant population groups. In addition to migrants employed in fishing industries, efforts should be made to include agriculture and other sectors in the migrant-rich communities outside of the seaport area in surveillance and other future surveys. By default, current HIV/AIDS programmes targeting migrants are found mostly in the tsunami affected seaport communities since most NGOs working with migrants

in Phang Nga Province were incepted as a result of tsunami relief and recovery programmes. However, it is important to periodically monitor the situation to ensure that the programmes meet real needs, particularly when the migrant labour force in Phang Nga appeared to shift across various sectors due to a change in physical environment. The province should also investigate the STIs/HIV/AIDS situation in various high risk groups and possible bridging populations. This would assist with obtaining empirical information for the strategic design and implementation of effective programmes to maintain the relatively low prevalence in the province. In the meantime, various types and sources of related information should be shared among government and non-government stakeholders to try to distinguish the big picture and sub-population specific circumstances for future programming.

5. Ranong Province

Ranong is a long, narrow coastal and land border province with 86% of its area mountainous and 14% coastal, sloping westward towards the Andaman Sea. Ranong is separated from Kawthaung Province (Victoria Point) in Tanintharyi Division of Myanmar by the Kra Buri River or Kyan River in Myanmar language. The province hosts one of the most bustling fishing ports on Thailand's western coast and is comprised of five districts: (1) Muang Ranong, (2) La-un, (3) Kapoe, (4) Kra Buri and (5) Suk Samran.

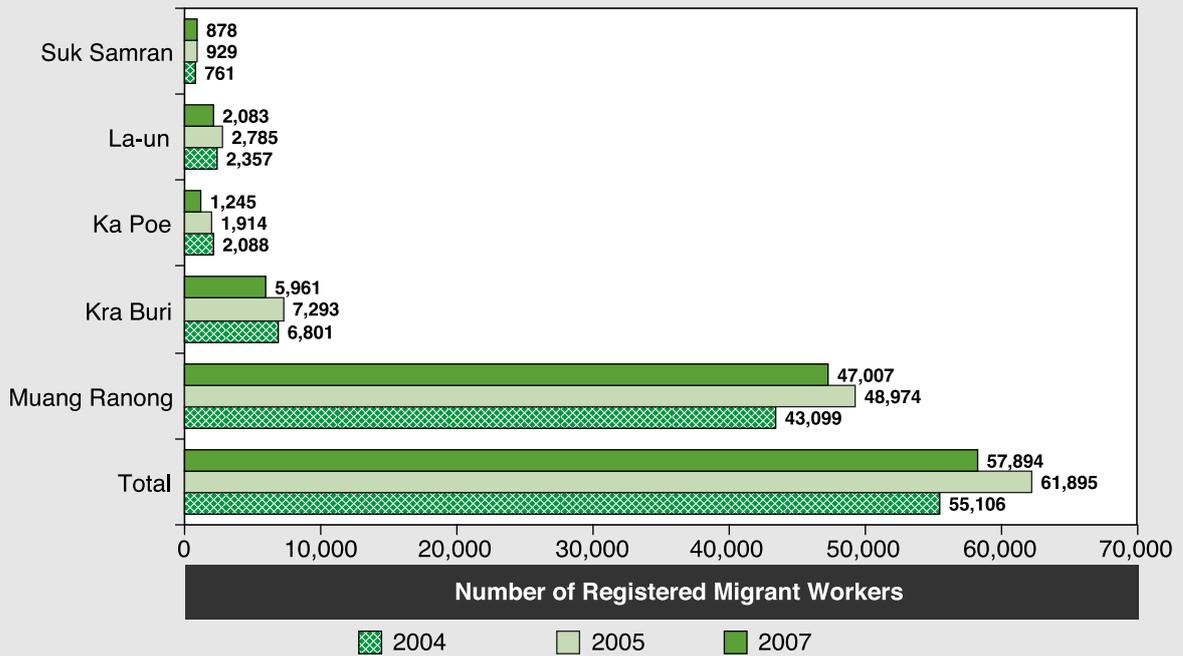
5.1 Migrant Demography

The fishery, downstream industry and agro-industries of coffee, rubber and fruit tree plantations require a large labour force. Consequently, there has been a steady flow of productive-age migrant labourers. Many come into Ranong from other provinces within Thailand and Myanmar, particularly from Dawei and Myeik in the Tanintharyi Division of Myanmar and Mawlamyine in the Mon State (PATH, WVFT and MAP, 2004). Although the number of registered migrant workers in Ranong, in 2005, stood at 61,895, Ranong PHO estimated that there are approximately 80,000 migrant workers from Myanmar, as evidenced by community mapping conducted in the area. This population group makes up approximately half of the total population in Ranong Province. There are almost no migrant workers from countries other than Myanmar registered in Ranong.

Muang Ranong District, where the fishing port and seafood processing plants are located, has according to records between 2004 and 2007, the highest density of migrant workers or about 80% of the total registered migrant workers. Suk Samran, Kapoe and La-un are three rural agricultural-based districts and the migrant populations of these three districts combined were less than 10% of Ranong's total migrant population (Figure 4.22).



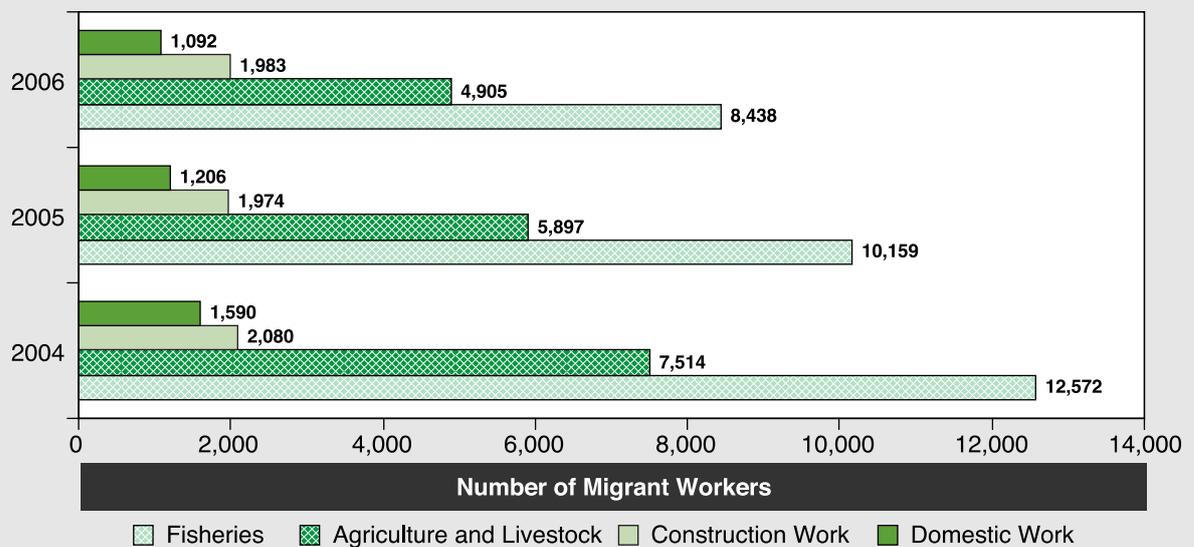
Figure 4.22 Number of Registered Migrant Workers in Ranong Province, 2004, 2005 and 2007



Note: The 2006 data was not available.
 Source: Ranong Provincial Office of Employment

A unique factor among the migrant populations in Ranong is the consistency in the number of migrants employed in the construction sector over the past few years. Meanwhile about one-third of registered migrants in each of the other sectors dropped out from the system as also observed in other provinces. Nonetheless, in the past three years, the fisheries industry has been the predominant source of employment for registered migrant workers. Fisheries account for slightly more than 50%, followed by the agricultural sector (about 30%), and construction work (about 10%) in the past three years (Figure 4.23). According to the registration data, Ranong’s migrant workforce has a fair share of male and female workers, with the ratio of 1.44 male to one female in 2004 and 1.27 to one in 2006.

Figure 4.23 Distribution of Migrant Workers by Occupation in Ranong Province, 2004-2006



Source: Ranong Provincial Office of Employment

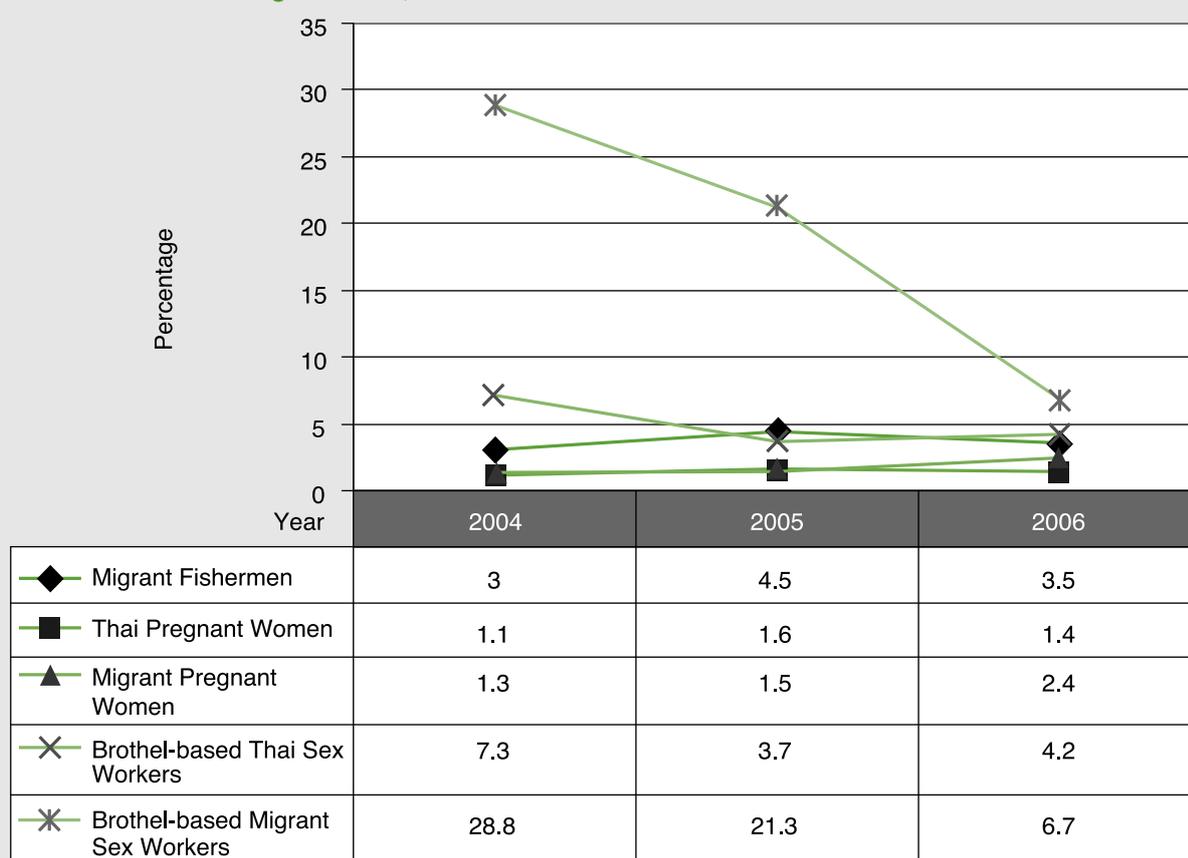
Besides the migrant population from Myanmar, Ranong also hosts an ethnic group of sea gypsies. In addition, the province also hosts a marginalised population of displaced Thai persons from Myanmar, many of whom have not been granted the Thai citizenship. These two population groups account for about 25% of the total population in Ranong Province.

5.2 HIV/AIDS and STIs Situation

In 2006, the largest group of reported symptomatic HIV/AIDS cases were found in Muang Ranong District with 157 cases (68 Thais, 89 Myanmar migrants), followed by Kra Buri District with 18 reported cases (15 Thais, three Myanmar migrants), and in Kapoe District with 11 reported cases (10 Thais, one Myanmar migrant).

The HIV sentinel surveillance surveys in migrant fishermen conducted by Ranong PHO between 2004 and 2006 indicated fluctuating rates of infection between 3-4.5%. The infection trend in migrant pregnant women, however, had gradually increased and the infection rate in 2006 (2.4%) was about 60% higher than the rate of the previous year (1.5%) and almost double the rate in 2004 (1.3%) as shown in Figure 4.24.

Figure 4.24 HIV Sero-prevalence among Various Groups of Thai and Migrant Populations in Ranong Province, 2004-2006

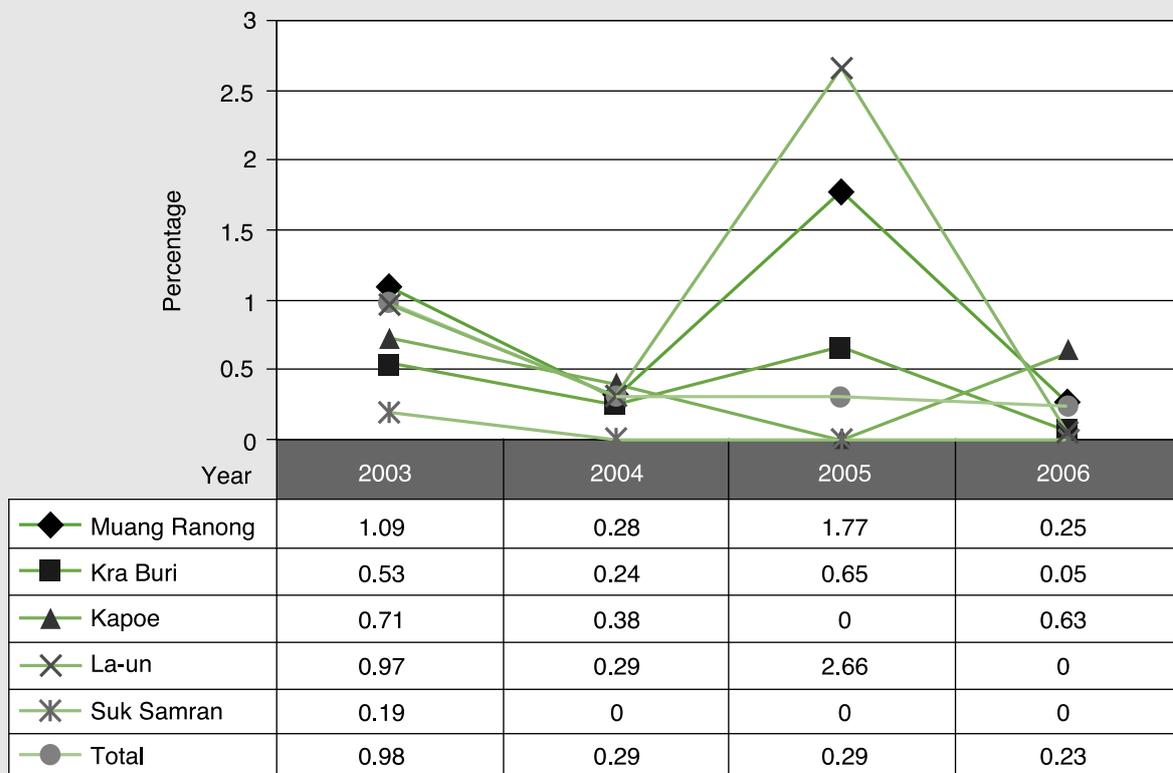


Source: Ranong Provincial Health Office

Despite a sharp decrease of HIV prevalence observed among migrant brothel-based sex workers in 2006, compared to 2005 and 2004, the HIV infection rates in both Thai and migrant sex workers were still high in 2006 (4.2% and 6.7% respectively). These can affect the epidemics among the general population at large if safe sex is not widely practiced.

As shown in Figure 4.25, STI data from the annual medical examination for migrant registration in Ranong indicates that overall rates of syphilis infection among migrants in 2006 seemed to decrease to only one quarter of that of 2003; from almost 1% to 0.23%. It is also observed that along with Muang Ranong District, the syphilis rates detected in the agricultural district of La-un seemed to be consistently higher than other districts, particularly in 2005, but the rate dropped to zero in 2006. Looking at the most recent report in 2006, the agricultural district of Kapoe reported the highest syphilis rate among the registered migrant population.

Figure 4.25 Syphilis Prevalence among Migrant Workers Receiving Medical Examination during Work Permit Application by District in Ranong Province, 2003-2006



Source: Ranong Provincial Health Office

The syphilis infection rates among different migrant groups from the 2003-2007 sentinel surveillance reports showed that the rates among migrant seafarers tended to be higher than those of male migrant workers in general. As shown in the Table 4.14, the same reports showed the constant rates of zero in the female migrant group throughout the reporting period.

Table 4.14 Syphilis Prevalence among Migrant Workers in Ranong Province, 2003-2007

Types of Migrants	Syphilis Prevalence (%)				
	2003	2004	2005	2006	2007
Migrant fishermen	1.5	1.0	1.5	2.0	1.0
Male migrant workers	1.0	0.0	0.0	3.0	0.0
Female migrant workers	0.0	0.0	0.0	0.0	0.0

Source: Ranong Provincial Health Office, Sentinel Surveillance Reports

5.3 Vulnerabilities and Risks

A behavioural study conducted in 2000 indicates that condom use during sex with sex workers among male Myanmar migrants in Ranong was as low as 40% (Ohnmar, 2000). Other research reports in 2004 show higher rates between 50-63% of condom use among male migrants when having sex with sex workers (Jian, 2004; IPSR, 2004). However, the PHAMIT baseline survey in the same year of 2004 demonstrates that condom use during the last sexual encounter among migrant workers in the province (of which, 62% of the respondents were fishermen) was very high during sex with sex workers (96.8%), but considerably low use with non-regular partners (36.4%). The low condom use rates in sex with non-regular partners were also reported in another study in 2004; with only half of single migrant men and about one-third of married migrant men sampled claiming their use (IPSR, 2004).

Exposure to HIV/AIDS education activities was reported to be low in general according to the same PHAMIT survey in 2004. It was found that only 17.4% and 24.1% of the surveyed migrants had participated in any HIV/AIDS campaign activities and condom use education respectively.

General knowledge on sexual transmission of HIV and condom use for HIV prevention among Myanmar migrants was fair, however knowledge and information on mother-to-child transmission was reported to be lacking (Jian, 2004; IPSR, 2004). According to Jian's study; 43% of the respondents were not sure if HIV can be transmitted through breastfeeding; a majority believed that there is no way to protect the unborn babies of HIV positive mothers from infection (52%); and only 22% knew about anti-retroviral drugs. IPSR also reported that more than half of the respondents believed that HIV cannot be transmitted through breastfeeding. This study also revealed that general knowledge of HIV/AIDS among male migrants was better than their female counterparts, and that female migrants tended to maintain a negative attitude towards PLHA as compared to their male counterparts.

5.4 Programmatic Responses

There are only a couple of NGOs working on HIV/AIDS among migrants in Ranong Province to date. Ranong PHO has also had less intensive HIV/AIDS programmes implemented among migrants but has rather sporadically collaborated with NGOs in recent years. The PHO established two STI clinics under PHAMIT in the health centers, one in Dan Health Center and another in Mitrapab Health Center in Muang Ranong District. Currently, WVFT implements the most intensive HIV/AIDS programme for migrants in Ranong, although its programme only targets migrants in fishing communities in Muang Ranong District. In addition to the traditional BCC activities, WVFT also provides HIV/AIDS treatment and care for migrant populations through its own clinic. Another NGO, the Saint Camillus Foundation of Thailand, has just begun HIV/AIDS work in Ranong in the areas of Kapoe, Suk Samran and some parts of Muang Ranong Districts, but concentrates more on Thai communities. The NGO also established a health clinic in Phaknam Sub-District in Muang District in 2008.

Table 4.15 demonstrates the type and number of migrant populations reached through various HIV/AIDS activities implemented in 2006 by NGOs in Ranong in the three districts of Muang Ranong, Kapoe and Suk Samran. According to this information, it appears that current programmes can reach only about 19% of the total registered migrant workers in these three districts. Considering that there are also a large number of unregistered migrants in these areas, the actual coverage of the programmes seems to be much lower than it appears to be. In Addition, only 40,000 condoms were distributed in 2006, which was less than one per person per year.

Table 4.15 HIV/AIDS Programme Reach for Migrant Population in Ranong Province, 2006 (Only Muang Ranong, Kapoe and Suk Samran Districts)

Category	Number / Quantity
Number of Registered Migrant Workers	51,817
Estimated Number of Migrant Population	Three to four times higher than the registered number
Number of Migrants reached through Outreach for BCC	10,000
Number of Migrants Received HIV Counseling and STIs Treatment	100
Number of Migrants Received PMTCT Services	102
Number of Migrants Received ART	8
Number of Migrants Received Home Visit Services	80
Number of Migrants Received Psychosocial Support	2,000
Number of Migrants Participated in PLHA Self-help Group	80
Number of Migrant Health Volunteers	140
Number of Condom Distributed (pieces)	40,000

Note: The number of registered workers in these three districts is based on 2005 data.

Source: WVFT and The Saint Camillus Foundation of Thailand

5.5 Discussion and Recommendations for Ranong Province

Data collection, management and use

Although the STIs/HIV/AIDS related data among migrants in Ranong Province is limited, as also seen in other provinces, one of the benefits of the current database systems is the relatively consistent types of data collected over a relatively long period of years. However, it will be more useful if STIs sentinel surveillance in various migrant groups could be made available, in addition to the syphilis data obtained from the annual medical examination. It is one of the key information sources that can help determine HIV risks and vulnerability. Similar to other provinces, the data collection systems and surveys should be modified so that the data collected is more comprehensive and relevant to the migration context, and can be analysed in a more in-depth way for future use in programming.

In addition to migrants in fishing and related businesses and the agricultural sector, there are also consistent numbers of labour migrants employed in construction work while numbers of labour migrants in other sectors seemed to drop over time. One quarter of the total provincial population comprised of the indigenous sea gypsy and displaced Thai population groups. These sub-populations made up about one-third of the total population in Ranong Province. With a lack of proper documentation and Thai citizenship, these population groups are not eligible for the government health schemes and their health needs, including HIV/AIDS, seemed to be unmet. Future health information systems should also be able to monitor their health and STIs/HIV status and to further explore if there is a need to implement targeted HIV/AIDS activities for them.

STIs/HIV/AIDS situation and programmatic responses

The cumulative reported symptomatic HIV/AIDS cases among migrants were highest in Muang Ranong District where a majority of migrants are concentrated. This data was consistent with the STI data identified during the annual medical examination for registered migrants. Muang Ranong District tended to report higher STI rates than other districts over time, except in 2005. However, it is unknown if the symptomatic HIV/AIDS cases were migrants who lived and worked in Muang Ranong District or whether they tended to seek health care at a more advanced facility, as the provincial hospital is located in the district, with support from an NGO in the district. Although less populated than Muang Ranong, all agricultural districts of Ranong also reported high rates of syphilis among registered migrants over different years. It is important to further explore their risk and vulnerability to understand the factors that contribute to high STI rates in various areas outside of the fishing towns of Muang Ranong District.

The HIV sentinel surveillance in Ranong Province reported a range of zero to two percent of infection among overall male migrants in the past few years. Whilst the STI surveillance among migrants showed rates of 0-3% of syphilis infection among male migrants, this is consistent with the relatively low condom use rates with sex workers among male migrants reported by a few studies in 2000 and 2004 (40-63%), and even lower condom use rates with their casual sex partners (33-50%). The relatively low level of syphilis infection (less than 1% over time) among migrants, identified through the annual medical examination for migrant registration, might be due to extremely low infection rates among female registered migrants as the surveillance reports showed zero rate of infection in this female migrant group. These support a recommendation for strengthening HIV and STI prevention services among the male migrant population in Ranong Province.

As compared to overall male migrants, HIV prevalence rates among migrant fishermen were higher in all reported years. The syphilis infection rates among migrant fishermen were also higher than the male migrants in all the reported years except in 2006. Although the information on condom use among migrant fishermen was not available, the PHAMIT survey in 2004 among migrant workers in Ranong (62% of which were fishermen) showed a very high rate of condom use in the last sexual encounter with sex workers (96.8%), but considerably low in casual sex (36.4%). With the low level of exposure to HIV/AIDS campaign and condom promotion (17.4% and 24.1%) as well as a fair level of knowledge on sexual transmission of HIV, it is possible that migrant fishermen contribute to the HIV epidemic in Ranong Province, either by becoming infected or spreading the virus to their sex partners.

There appeared to be a sharp decrease in HIV infections among migrant brothel-based sex workers over the past few years (from 28.8-6.7%), although the rate in 2006 was apparently still higher than the national level. Although STI prevalence in this population is unknown, the decreased HIV prevalence could be partly due to a continuity of STI treatment and control programmes implemented by both the PHO and WVFT to the direct and indirect sex workers in the piers and migrant communities. In addition, HIV prevalence among Thai sex workers still stood at 4.2% in 2006. Therefore, Ranong Province might need to retain its rigorous STI programme for both Thai and migrant sex workers to reduce the contributing factors of STIs to the future HIV epidemic, while strengthening the STIs/HIV/AIDS surveillance and clinical data management system.

While the prevalence of syphilis among general female migrants had not been found over the past five years, despite an increase in the proportion of female migrants in the province, their HIV prevalence tended to be alarming as the rates among pregnant migrant women gradually increased from 1.3% in 2004 to 2.4% in 2006. The absence of STIs may suggest the low level of casual sex and/or unprotected sex with multiple sex partners among female migrants, while the increased HIV prevalence may reflect infections among couples with discordant HIV status. Without an appropriate response to urgently address HIV

prevention in female migrants, the HIV infection rates among female migrants might further increase and might result in the increased number of HIV positive pregnant migrants in the future as well. The increased HIV prevalence among pregnant migrant women also suggests the need for more PMTCT services among migrants in the future. Even if the PMTCT could not fully benefit pregnant migrant women, it might be a good strategy for Ranong Province to promote accessible VCT among migrant couples, married or unmarried, so that they can discover their HIV status early in the stage, before deciding whether to have children rather than to find out their status during antenatal care which could be too late.

Existing programme activities are able to reach only about one-fifth of registered migrant workers. In 2006, the PHO and NGOs working with migrants in Ranong Province reported to reach only 19% of the total registered migrants in the three districts of Muang Ranong, Kapoe and Suk Samran combined, with an extremely low number of condoms distributed compared to the number of migrant labourers. Considering that there are also a large number of unregistered migrants in the province, the actual coverage of HIV/AIDS programmes for migrants could be much lower than indicated by the existing data. With the fluctuating HIV and STI prevalence, as well as the generally low condom use rates among male migrants, and the gradually increased HIV prevalence among female migrants, it is important to urgently intensify BCC outreach activities accompanied by condom promotion and distribution for migrants in Ranong Province.

Similar to Trat Province, Ranong Province has also been reported by Myanmar migrants as one of their key transit communities, especially for those who further migrate to Pang Nga and other southern provinces of Thailand. Therefore, it is also crucial for the local health authorities and NGOs to assess the situation and determine the migration patterns, timeline, access to relevant services and the interactions migrants may have with the host community as well as the migrant communities during their transit in Ranong Province. If the assessment result shows any potential impact on the local epidemic, as well as the risk and vulnerability among the migrants on transit, a tailor-made intervention should be implemented to fill the gap.

5.6 Conclusion

Although the STI/HIV/AIDS database systems and the programmatic response to HIV/AIDS among migrants and other populations in Ranong are found to be insufficient, there are some positive signs for potential improvement. The interest and efforts of the PHO should be continued and could be further strengthened, particularly in continuing close collaboration with NGOs and other stakeholders to ensure the appropriate scope and scale of the future programmes. This includes assessing the specific needs of indigenous and displaced populations, who make up one quarter of the provincial population.

6. Tak Province

Tak Province, located in the north of Thailand, shares a 560 kilometer border with the Kayin (Karen) State of Myanmar. It is divided into nine districts: (1) Muang Tak, (2) Ban Tak, (3) Sam Ngao, (4) Mae Ramat, (5) Tha Song Yang, (6) Mae Sot, (7) Phop Phra, (8) Umphang and (9) Wang Chao. Of the nine districts, the five border districts with the highest number of migrant workers are Mae Sot, Tha Song Yang, Mae Ramat, Phop Phra and Umphang. The Asian Highway (AH1) and the Thai-Myanmar Friendship Bridge link Mae Sot and Myawaddy Town in Myanmar, making Mae Sot a thriving hub of border trade and industry in the lower north of Thailand.

Unlike Mae Sot District, the bustling trading and manufacturing hub, Tha Song Yang, Umphang, Mae Ramat and Phop Phra Districts are predominantly rural agriculture-based districts.

6.1 Migrant Demography

Rapid economic growth of both agricultural and non-agricultural sectors has led to a labour force shortage in Tak Province. Consequently, the number of registered migrant workers in the province grew from 50,293 in 2002 to 101,265 in 2005. It is estimated that there were about 100,000 migrant workers between 2003 and 2006. However, in 2006 the number decreased to less than 40,000. Almost all migrants in Tak Province (more than 99%) are from Myanmar (Table 4.16).

The highest population of migrant workers resides in the border districts of Mae Sot (69.8%), Phop Phra (16.6%), Mae Ramat (5.3%), Tha Song Yang (3.6%) and Umphang (3%) (Tak Provincial Office of Employment, 2008). About two-thirds of migrants are factory workers, mainly in Mae Sot District. The majority of the remaining one-third are employed in the agricultural sector in the four rural districts of Phop Phra, Mae Ramat, Tha Song Yang and Umphang. It is evident that the number of female migrants working in Tak Province has increased over the last five years.



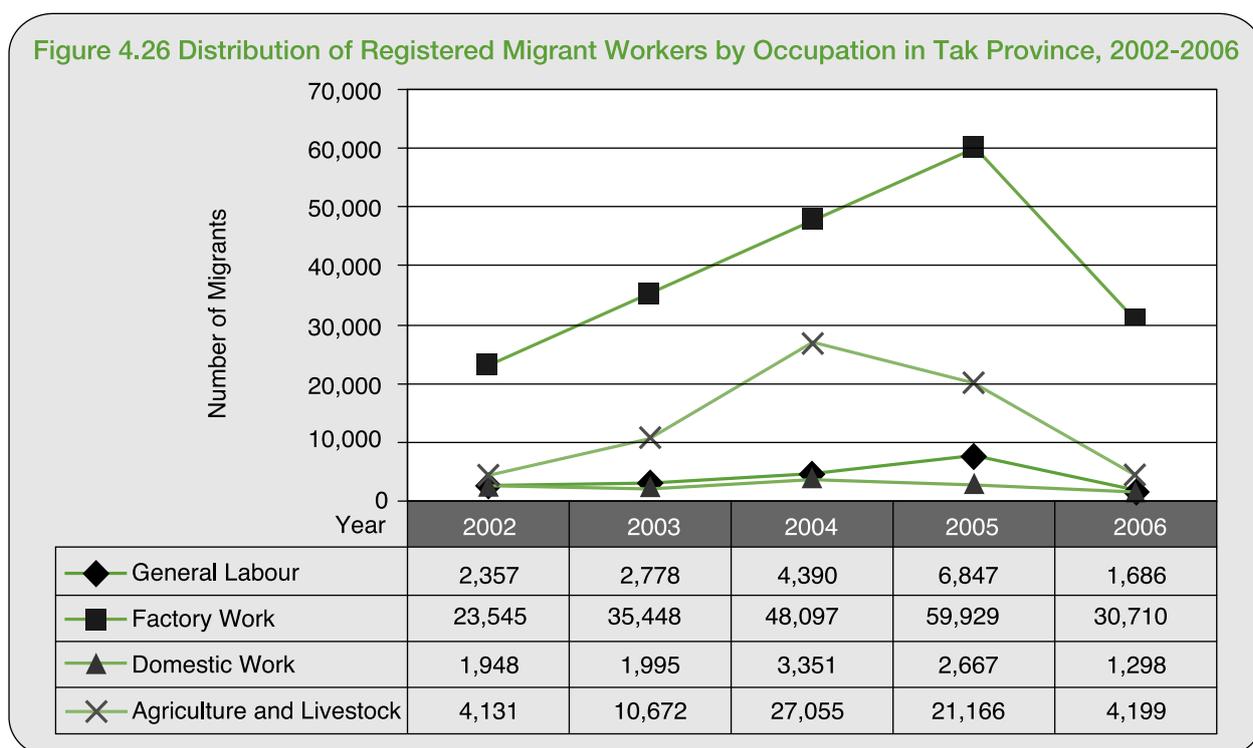
Table 4.16 Distribution of Registered Migrant Workers in Tak Province by Nationality, 2002-2006

Country of Origin	2002		2003		2004		2005		2006	
	Male	Female								
Myanmar	21,207	29,045	11,731	20,250	37,861	50,775	36,263	64,834	13,898	24,518
Lao PDR	11	9	12	16	29	14	85	44	0	1
Cambodia	10	11	14	13	24	14	19	20	1	3
Total	21,228	29,065	11,757	20,279	37,914	50,803	36,367	64,898	13,899	24,522

Source: Tak Provincial Office of Employment

Migrants working in Mae Sot District factories comprise of both workers with and without work permits. This also includes daily labourers commuting from diverse areas across the border through the Thai-Myanmar Friendship Bridge (PATH, WVFT and MAP, 2004). The largest numbers are from Mawlamyaing and Bago in Kayin State, in the eastern region of Myanmar. Despite the fact that convenient transportation is available through Mae Sot, most ethnic migrant workers prefer entry into Mae Sot District via other rugged routes along the over 500 kilometers of border area.

The majority of registered migrant workers are employed in garment and textile factories (Figure 4.26), followed by the agriculture sector, general daily-labour, and domestic work. This could very well explain the proportion of the female migrant population registered in Tak Province, which has always outnumbered the male migrant population (Table 4.16).



Source: Tak Provincial Office of Employment

In addition to the number of migrant workers, in 2006 Tak Province reported that 157,980 ethnic populations were living in the province (Tak Hill Tribe Welfare and Development Center, 2008). The Karen (69%) makes up the largest group, followed by Mon (19%) and highland Thai (7.7%), respectively. Lahu, Lisu, Mien and Akha comprise less than 5% of Tak's ethnic population.

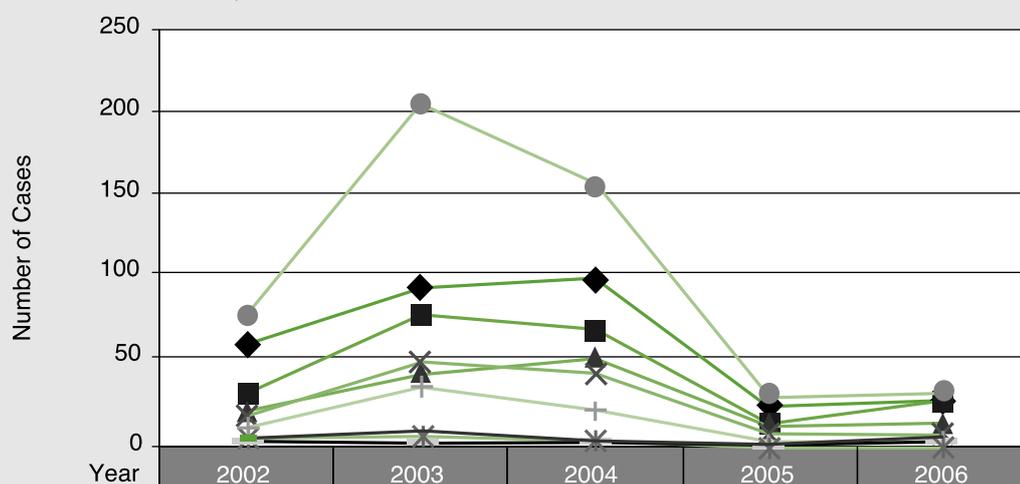
Tak Province is unique compared to other provinces included in this study because of the existence of temporary shelters (also known as "camps"). The shelters host over half of the displaced persons (also known as "refugees") seeking refuge in Thailand as a result of the internal conflict in Myanmar. In March 2008, the Thai-Burma Border Consortium (TBBC) estimated that 73,184 individuals reside in the three refugee camps in Tak Province, including Mae La Camp in Tha Song Yang District, Umpiem Mai Camp in Phop Phra District and Nupo Camp in Umphang District.

6.2 HIV/AIDS and STIs Situation

Tak Province is one of the provinces with the richest information available in relation to STIs/HIV/AIDS among migrants and refugees among all studied provinces, and perhaps in Thailand. Unfortunately, there is limited information about STIs/HIV/AIDS available for analysis in this study due to difficulty retrieving data.

As shown in Figure 4.27, overall, reports from Tak PHO between 2002 and 2006 indicate a peak number of HIV/AIDS symptomatic cases among migrants in the province; with over 500 reported cases in 2003. The number remained at more or less the peak level in 2004 (450 cases) and dramatically decreased to 78 cases in 2005 before increased again to 130 cases in 2006. The highest numbers of migrant HIV/AIDS symptomatic cases have always been found in Mae Sot District over the years; with an average of one-third of all the migrant cases. Ban Tak and Muang Districts are the next in line with much smaller reported cases in 2002-2004 but the reported cases in 2005 and 2006 were similar to those in Mae Sot District.

Figure 4.27 Number of HIV Symptomatic and AIDS Cases among Migrants by District in Tak Province, 2003-2006

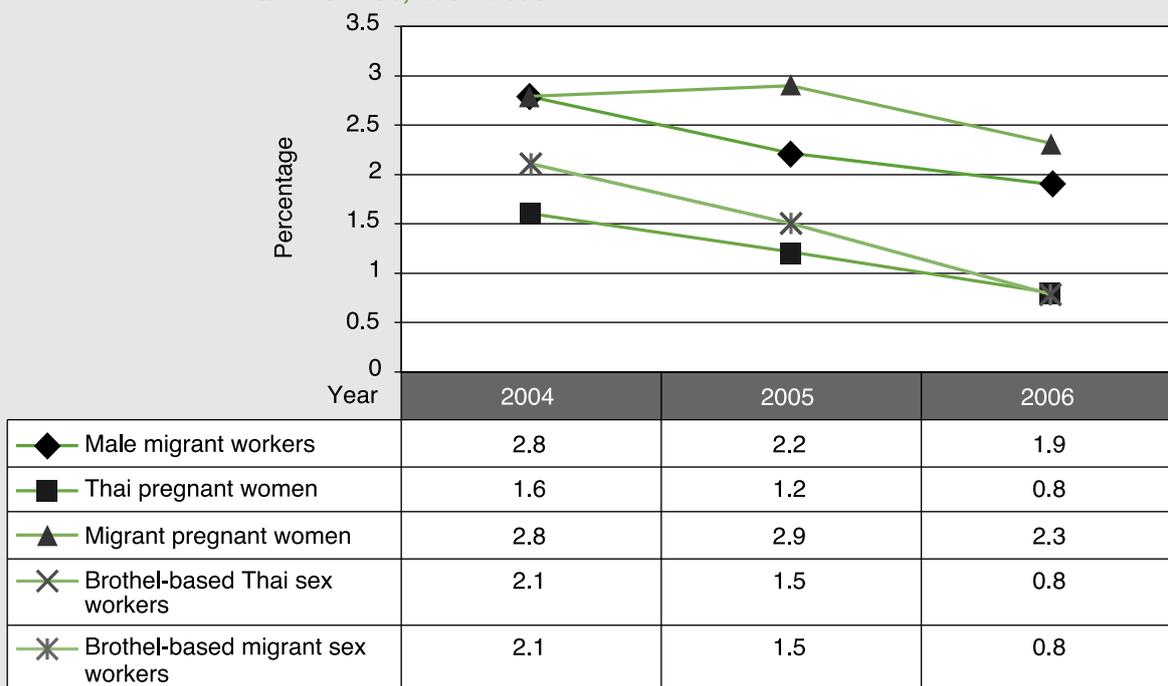


◆ Muang	57	93	96	22	27
■ Ban Tak	30	73	65	12	27
▲ Sam Ngao	19	41	49	1	12
× Mae Ramat	17	48	41	7	6
* Tha Song Yang	6	7	1	0	0
● Mae Sot	73	201	152	24	44
+ Phop Phra	10	34	20	2	8
— Umphang	5	4	5	0	3
— Wang Chao	6	9	1	0	3
Total	223	510	450	78	130

Source: Tak Provincial Health Office

One positive observation in Tak Province is that HIV prevalence in various population groups including Thai and migrant sex workers, has gradually decreased, according to routine surveillance (Figure 4.28). Nevertheless, HIV infection rates among pregnant women over the past three years were higher within migrant women in comparison to Thai women.

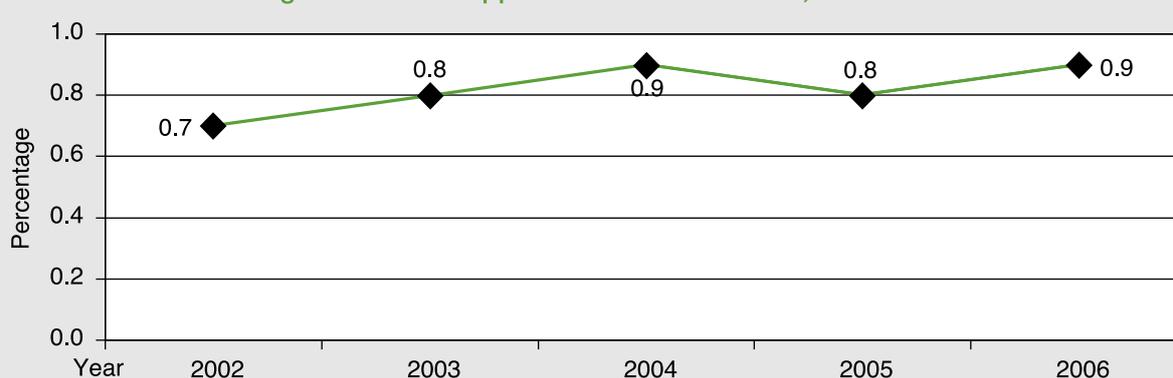
Figure 4.28 HIV Sero-prevalence among Various Groups of Thai and Migrant Populations in Tak Province, 2004-2006



Source: Tak Provincial Health Office

As in other provinces, there is a lack of STI data available to enable further analysis and to inform programme planning. Results from the compulsory medical examinations of migrant workers during the work permit application process indicate that syphilis prevalence among this group remained constant at an average of 0.8% over the past five years (Figure 4.29).

Figure 4.29 Syphilis Prevalence among Migrant Workers Receiving Medical Examination during Work Permit Application in Tak Province, 2002-2006



Source: Tak Provincial Health Office

6.3 Vulnerabilities and Risks

The driving force behind the migration of the predominantly rural Myanmar population to Tak Province includes financial difficulties and the hope for a better life in the future. They arrive in Thailand with little or no knowledge about HIV/AIDS and sexual health, and in some cases basic knowledge of reproductive health (IOM, 2007). Women are more likely to have less knowledge than men, as identified in IOM's 2006 study, whereby 22% of married females and 26% of single females reported having never heard about condoms.

Many studies confirmed great gender disparity in relation to exposure to HIV/AIDS interventions and in relationship power dynamics. Based on a study conducted by IOM in the migrant factory worker group, almost three in every four married males as opposed to only one in every two married females had participated in some training or received some information about HIV/AIDS and STIs. The single male and female population groups, on the other hand, participated less frequently in HIV education and prevention interventions (IOM, 2007). Sex workers, especially indirect sex workers, are significantly vulnerable because HIV information and services often do not reach them.

Knowledge about condoms remains limited. According to a survey conducted in 2003, around 60% of male and only 15% of female migrants said they had ever seen condoms before (Ruruenroj, 2006). In addition to this, condom use with regular partners among married migrants was rare due to trust between the couple or a lack of negotiating skills in order to demand partners use a condom (Ruruenroj, 2006; IOM, 2007).

Condom use among migrant men was low. PHAMIT baseline assessments in 2004 showed that among its six studied provinces, migrant men in Tak had the lowest rate of condom use in the most recent sexual contact with sex workers; with only half of the respondents declaring they had used a condom. However, condom use with non-regular partners among migrant men in Tak seemed to be much better than in other provinces of study except Trat Province; with a rate of 42.9%. The participation rates of migrant workers in condom use education were as low as 34.5% while participation in HIV/AIDS education activities was even lower.

6.4 Programmatic Responses

No in-depth data could be obtained for the analysis regarding programmatic responses to HIV/AIDS in Tak Province. However, data from interviews in 2006 with Tak PHO and a few NGOs actively working on HIV/AIDS programmes for Myanmar migrants in Mae Sot District depict that coverage in their outreach activities was greater than other provinces. Approximately 47% of migrant populations were reached by government and a few NGOs (Table 4.17). This remarkably high coverage may be due to the nature of migrant characteristics. For example, the majority of migrants in Mae Sot District are factory workers who tend to be less mobile compared to the highly mobile migrant seafarers in other coastal provinces. Also Mae Sot District is a hot spot with a long history of HIV/AIDS programmes delivered to migrants in Thailand. As in other provinces, the programmes have focused mostly on BCC while care and treatment services were very limited. Unfortunately, information about condom distribution is not available.

Table 4.17 HIV/AIDS Programme Reach for Migrant Population in Tak Province, 2006 (Only Mae Sot District)

Category	Number / Quantity
Number of Registered Migrant Workers	Data Not Available
Estimated Number of Migrant Population	60,000
Number of Migrants reached through Outreach for BCC	28,292
Number of Migrants Received HIV Counseling and STIs Treatment	1,284
Number of Migrants Received PMTCT Services	60
Number of Migrants Received ART	55
Number of Migrants Received Home Visit Services	115
Number of Migrants Received Psychosocial Support	281
Number of Migrants Participated in PLHA Self-help Group	65
Number of Migrant Health Volunteers	321
Number of Condom Distributed (pieces)	Data Not Available

Source: Tak Provincial Health Office, WVFT, MAP Foundation and Mae Tao Clinic

6.5 Discussion and Recommendations for Tak Province

Data collection, management and use

Tak Province has one of the most long-standing HIV/AIDS services for migrants in Thailand. However, most of the STI/HIV/AIDS data among migrants in the province are from extremely limited sub-populations of migrants and mainly from Mae Sot District. This is in line with HIV/AIDS programmes addressing migrant populations in the province that are mostly, if not all at the time of this study, concentrated in Mae Sot area. Several types of STI/HIV/AIDS data among selected migrant groups have been collected by both government and NGOs, especially in Mae Sot District. However, the data has not been properly stored, managed, and utilized. This is not only in relation to integrating data management and use from various government and NGO sources but also within the health authority sector. This was also found in other studied provinces. Even though Tak is not a coastal province with a highly mobile migrant seafarer population, the non-Thai population in the province is very diverse in nature. In addition to economic migrants, the province also hosts a large number of refugees, displaced persons from Myanmar who prefer to reside in local Thai communities rather than in refugee camps, indigenous and ethnic populations who also lack access to public health services, as well as daily border-crossing labourers from Myanmar. This unique characteristic drives a necessity for the province to consider and thoroughly develop appropriate methodologies and tools to collect and analyse STI/HIV/AIDS related data from different population groups and geographical areas to ensure appropriate programming for these marginalised populations. A unique and strong leadership is very important for the province in order to coordinate data and efforts among the number of service providers and other stakeholders, government and non-government. A coordinated approach will ensure harmonised data collection that could be comparable or at least collated to maximise its use and everybody's effort.

STIs/HIV/AIDS situation and programmatic responses

Migrants in Mae Sot District, especially in Mae Sot Municipality and surrounding towns, are obviously more populated than other areas in Tak Province. While the migrant population in Mae Sot accounted for more than two-third of all the provincial registered migrant population, the reported migrant HIV/AIDS symptomatic cases in the past half decade show a different proportion. Although more cases have been identified in Mae Sot District, the reported cases from Mae Sot have always accounted for only one-third (31-39%) of all migrant cases in the province. While most, if not all, HIV/AIDS programmes targeting migrants could be found in Mae Sot and other border districts, the inner cities of Ban Tak and Muang Tak Districts are next in line after Mae Sot District in terms of reported migrant HIV/AIDS cases, with similar numbers to those in Mae Sot District over the past two years. The characteristics of reported migrant cases from Ban Tak and Muang Tak Districts are unknown. However, if any of the Mae Sot cases were referred to the public hospitals in two other districts with high reported symptomatic HIV/AIDS cases, the cases would be reported as Mae Sot cases. On the other hand, considering the advanced facilities and increased familiarity in providing health services to migrants among staff at Mae Sot General Hospital, the accessible and relatively well-developed NGO networks in Mae Sot area, as well as the harsh mountainous road conditions and travel time across districts, it is less likely that ill migrants who reside in Mae Sot or other border towns would travel to seek healthcare in the two inner cities of Tak Province. This evidence and these factors suggest a strong need to further investigate the HIV/AIDS situation among migrants in Ban Tak and Muang Tak Districts while continuing the programmes in Mae Sot area. Although the data is limited and based solely on reported migrant HIV/AIDS cases, if the resources are constrained and prioritisation is needed, it might be worth considering allocating more resources and effort in Ban Tak and Muang Tak Districts rather than those along the border outside of Mae Sot District.

Unfortunately, the data on reported symptomatic HIV/AIDS cases among migrants could not be disaggregated by occupation and sex. However, it is evident that there have always been more female than male registered migrants and in fact the numbers of female registered migrants had increased over the last five years. HIV prevalence among migrant pregnant women has always been higher than their Thai counterparts. This is consistent with the results of the existing studies that report very rare cases of condom use with regular partners among migrants in all the studied groups. Some studies among female migrants in the province also found that female migrants were more vulnerable to HIV infection as they had a lower level of knowledge than male migrants. A very small proportion had ever seen condoms, perhaps due to their lower level of exposure to STI/HIV/AIDS related education activities as indicated by some studies' results. Accordingly, it could be implied that it is important for the government and NGOs to identify and provide the HIV/AIDS services relevant to female migrants in Tak Province to ensure gender-balanced programming and to avoid the exclusion of female migrants living in already marginalised circumstances with higher vulnerability.

According to the annual medical examination component of the migrant registration process, syphilis detection rates have been constant at an average of around 0.8% for the past five years. Although the rate seems to be low, considering that Tak Province has an estimate of over 100,000 migrants, the actual number of migrants who have any STIs could be higher. Unfortunately, it is unknown whether STIs are more prevalent in migrant population sub-groups in specific geographical areas. A more in-depth analysis of the existing data would be useful for future programming.

Condom use among migrant men in Tak Province, especially in Mae Sot District, is reported to be very low. While the condom use rate in transactional sex tends to be higher than in sex with regular and casual sex partners in general, the PHAMIT survey in 2004 showed that only 50% of the surveyed male migrants reported condom use in their last interaction with sex workers. Although condom use with casual partners among migrant men in Tak Province was higher than many other PHAMIT's provinces,

the reported 43% of condom use with casual partners is still considerably low. Although HIV prevalence among male migrant workers in the province was reported to be not very high as compared to other provinces, low condom use rates with various types of sex partners indicate a potential explosion of the HIV epidemic among migrants in this area, especially when the current HIV/AIDS programme coverage is still less than satisfactory.

The available data showed that the level of migrants' exposure to HIV/AIDS and condom education activities was much higher than other studied provinces, especially in Mae Sot District; with about 35-47% exposure. Nevertheless, coverage is still too low to have any significant impact on the control of the epidemic, particularly when existing programmes focus mostly on BCC. This is the case when care and treatment services that could well lead to the positive prevention effort were reported to be extremely limited as compared to the number of reported HIV/AIDS cases.

It is important to note the relatively low prevalence of HIV infection rates among sex workers, both Thai and migrant. HIV/AIDS programmes that respond to the needs of sex workers should be maintained in order to sustain the low infection rates among this population.

HIV prevalence among refugees in the camps appears to be very low as reported by the UNHCR and mentioned in Chapter III. However, it has been well recognised that the refugees also have interactions with the local communities near the camp areas. A number of refugees commute between the camps and the surrounding communities to seek jobs in order to maintain their livelihood. It is unknown if refugees are also involved in any activities that could put them at risk of HIV infection. Although the local health authority has no mandate to work in the refugee camps and all the health and social services in the camps are the responsibility of NGOs with funding supports from various international donors, it is important for local health authorities and NGOs to work hand in hand not only to share information but also in supporting one another to maintain the low prevalence status of camp residents.

It is also important to note that Tak Province also hosts some 157,980 ethnic populations, with and without Thai citizenship. Although the numbers are unknown, those that have not been able to obtain Thai citizenship are likely to be more marginalised and vulnerable than economic migrants. As a non-Thai citizen, they are not eligible to access free health services through the National Universal Health Coverage Scheme that Thai citizens are entitled to. And because they are not registered labour migrants, they cannot join the CMHI scheme. This leaves them with no option but marginalisation and vulnerability to health risks including HIV/AIDS.

Similar to Ranong and Trat Provinces, Tak Province is one of the key gates for migration. As found in the report from Ranong and Samut Sakorn Province, a large proportion of Myanmar migrants destined for the two sea port provinces migrate through Tak Province, especially through Mae Sot District. The fact that a number of Myanmar migrants migrated to Ranong Province through Tak while Ranong is also one of the key border-crossing points indicates that Tak is a well recognised transit community among migrants from Myanmar. Effort should be made to reach as many migrants in Tak before they further migrate to other provinces that do not have HIV/AIDS programme targeting migrant communities.

Chapter V.

Strengthening
the Responses
to STIs/HIV/
AIDS Situation in
Migrant Population:
Implication from
the overview of
migrant policy
and information
systems in Thailand

CHAPTER V. STRENGTHENING THE RESPONSES TO STIS/HIV/AIDS SITUATION IN MIGRANT POPULATION: IMPLICATION FROM THE OVERVIEW OF MIGRANT POLICY AND INFORMATION SYSTEMS IN THAILAND

The summary of the HIV situation in the studied provinces, as demonstrated in Table 3.3, suggests that the overall HIV prevalence among migrants tends to be many times higher than that of Thais. In some geographic locations, such as sea ports and industrial sites, the HIV prevalence among migrants was reported to be as high as 6-10%. Based on the review and analysis of the information collected for this study, the following issues should be considered in order to strengthen the national and local responses to HIV/AIDS issues among migrants as well as Thais in host communities.

Responding to the health and HIV/AIDS needs of migrants is a real challenge for Thailand, particularly given the dynamic, diverse sub-populations within the migrant population, their diverse background on HIV/AIDS related knowledge and practices, as well as the lack of concrete policy and national budget for migrants. The lack of appropriate programmatic response that could comprehensively and extensively reach migrants could not only put migrants at further risk and vulnerability to HIV transmission, but could also result in a greater HIV/AIDS epidemic in Thailand. This is potentially a big concern in the future should sexual interactions between Thai and migrant populations take place more commonly.

1. Data collection, management and use

To ensure that the programmatic response is technically sound and evidence based, obtaining all types of relevant data that are valid, reliable and up-to-date is the first step. Once the data are appropriately collected, there is the need to appropriately store, maintain and manage the data sets for convenient analysis and use. Although populations from neighbouring countries have been migrating into Thailand as cheap labour to replace the decreasing Thai labour force for almost two decades, the necessary information related to migrant populations and their health status and social needs are still very limited and fragmented. Government, international organizations such as the World Health Organization and other agencies of the United Nations, NGOs, and academic society have all recognized the need for more appropriate database systems and have tried to initiate various solutions. Nevertheless, it is still a big challenge for all agencies to come up with better systems since both population and health information systems are very large and heavy. These information systems are the mandate of government authorities, and the key institution in Thailand that is able to allocate a budget to establish and manage such big and complicated database systems is the government. However, the government authorities who are responsible for the information systems usually lack the capacity to improve and link the fragmented systems, in addition to complications with linking systems across different related ministries. As it will take significant time, budget, human resources and effort to combine all the existing systems or even to simply correlate the information collected through the various systems to make it compatible, the following interim solutions are highly recommended.

Improving the management and use of migrant registration databases

Essential datasets on labour migrants are not organised and presented in a way that is easily analysed and used. Even though there is a demand for specific data to be collected during the migrant registration process, some data are not collected or even if the data is collected, it is not sufficiently analysed and utilised by the local authorities. For instance, although a set of data on migrant demographics is collected, the data that are commonly compiled and presented at both national and provincial levels are those related to nationalities of migrants and the business sectors in which they are employed. Sometimes, the gender of migrants can also be presented. It is unclear what the migrant population database looks like and how the data is entered into the database system but it is very cumbersome to try to obtain more detail such as the data of registered migrants in each district disaggregated by nationality and gender, or business sectors and nationalities, etc. In addition, the validity and reliability of the data is also of concern. Through this study, it was found that some data is not consistent with the protocol, while sometimes discrepancies were found in the data presented at different times and venues although they were drawn from the same data set. For example, the increased number of registered migrants in 2005 as compared to 2004, even though new comers were not allowed to register in 2005.

A frequent change in labour migrant registration policy, the complicated procedure and strict but confusing timeline for migrant registration are perhaps key factors influencing the consistent decrease in registered migrants. In addition is the insufficient data, particularly on the migrant health examination database system. Throughout this study, it was found that the migrant medical examination data, which is conducted annually by local health facilities where the registration takes place, is inconsistent and confusing both in terms of the data collected as well as the different case definitions used in different locations in different years. Although these do not affect the interpretation of HIV/AIDS status among migrants, as HIV antibody test is not required for the work permit application and it should remain so, it does affect the interpretation of other health conditions of migrants. The biggest obstacle for this study is that the STI data obtained from the annual medical examination were not available since, although the syphilis antibody test was required, the data had not been compiled, analysed and reported in many studied provinces. It took a long time and lots of effort to retrospectively compile and analyse the data collected over many years, which could also affect the data quality if the data were not properly stored and managed.

In theory, all registered migrant workers must undergo medical examination before being issued a work permit. However in practice this does not happen and is the cause for the inaccurate statistical reporting of migrant worker's health status in many provinces. It is noticed that during the registration process, the designated migrant medical examination health facilities were overwhelmed with their workload. An influencing factor was due to the work permit application period being limited to only one-two months, and subsequently, the health facilities were not able to perform all the tests within the stated timeline. On the other hand, migrants tend to process for the examination during the last few weeks of the registration period. As a result, in some provinces, the Provincial Office of Employment went ahead to issue work permits for migrants and asked them to submit their health certificates to be issued by the designated health facilities once they were available. However, despite flexibility being allowed, it was discovered that many migrant workers did not submit their health certificates or even skipped the process for medical examination once they already obtained their work permits. Several attempts have been made by the government to try to adjust the migrant registration process to fill loopholes including an introduction of the one-stop service instead of processing it at three different ministries' offices. Nonetheless, the number of registered migrants has gradually decreased. With the demand for labour force, it is believed that labour migrants have simply dropped out of the registration system while continuing to live and work in Thailand, particularly because the business sectors could maintain their productivities. At present, there is no mechanism to follow up on these migrant workers and ensure they comply with the regulations.

It is the mandate of the MOPH to manage and implement the annual medical examination and issuance of health insurance for registered migrants. Although it is necessary for migrant health examination results and health

insurance figures to be submitted from all PHOs to the MOPH at the central level, the data is often delayed and incomplete. The lack of capacity at the MOPH to monitor and follow up data submission as well as the capacity to compile and analyse the migrant health data at the central level leads to the unavailability of the data for the use at central level. This is particularly in relation to evidence-based migrant health policy development and to provide appropriate technical support to the local health authorities.

For HIV related data in particular, some provinces have already initiated their own surveillance system by conducting HIV antibody tests and behavioural surveys among migrants who undergo medical examinations for their work permit. It is recommended that this should be expanded to other provinces, particularly those with a large migrant populations and relatively high HIV prevalence. The study should be performed with the standard protocols to ensure that their privacy and confidentiality are respected. Pre-test counselling must be provided to all participants and the test must also be accompanied by post-test counselling for those who prefer to receive their test results. The study results should only be used for the purpose of programme planning and design and must be kept in confidentiality. However, the frequency of surveillance during the medical examination need not be implemented annually but rather be conducted consistently based on local needs.

It is understandable that current limited data might be already sufficient for the MOL as its key interest is to understand the needs of different types of labour forces in order to plan for appropriate labour supply. However, the current information is insufficient to handle other issues related to migrants in Thailand. According to the most current policy for labour migrant registration in 2004, migrants and their dependents had to register with the MOI to obtain their temporary household identification numbers before they could undergo medical examination and then apply for a work permit with the MOL. However, since the registration with the MOI is a one time procedure implemented in 2004, and the details of migrant demographic data are hardly made available, this could be considered a missed-opportunity for other authorities, such as MOPH, Ministry of Education and Ministry of Social Development and Human Security to utilise the migrant demographic data for their work plan development. It is important not to forget that more than one-third of labour migrants also have accompanied families/dependents who are not registered with the MOL but need to be able to access health and social services.

Joint collaboration and planning are strongly recommended among the line ministries on the required migrant data sets. This could ensure that the collected data are sufficient for all line ministries, and reduce data duplication collected by various departments involved in the process. All the line ministries should enhance their technical capacity to compile, analyse and use the data collected in their work and future national policy development.

Since migrant issues related to health are very complex and time sensitive, the national data might be adequate for policy development but could be insufficient for local authorities and partners to appropriately design their work programmes. The collected data should also be compiled, analysed and used at the local level however extensive technical support from the central level is required in order for the local staff to achieve this. To enable the recommendations provided, the migrant registration policy, procedures and associated costs have to be reviewed and revised, with inputs from local implementers, to ensure relevance of the policy and process. In addition, the amended policy and process should also take into consideration the cost-benefit of registration for the government but also on the sides of migrants and their employers to encourage as many migrants as possible to register.

Strengthening surveillance systems and surveys and the data analysis and use

Since HIV sero-surveillance and BSS in migrant populations do not fall within the official mandate of the MOPH and the PHOs, there is a disparity in implementing surveillance surveys at the provincial level. This is mostly dependent on budget and recognition of the importance of conducting the surveys. Nowadays, it seems to be crucial for the PHOs to regularly implement the HIV sero-surveillance survey among migrants, particularly

in provinces with pronounced HIV infection levels. Although some provinces have initiated an HIV serological survey during the medical examination, the surveyed migrants are only limited to those applying for a work permit and could not represent all migrant populations since migrants who have some health problems may self-select to not undergo medical examination. For the purpose of strengthening HIV data among migrants, an application of the Second Generation Surveillance Survey (SGSS) is crucial. This will identify both STI and HIV status as well as related risks and/or protective behaviours among various migrant sectors, documented and undocumented. In particular, the integrated biological and behavioural survey (IBBS) is ideal, not only because the real time evidence on both biological and behavioural factors can be obtained in one study, but also due to the difficulty in reaching and sampling migrants who tend to be highly mobile as compared to the general population.

To conduct the SGSS and/or the IBBS, a great deal of budget, human resources and technical expertise is required. This, perhaps, is the key factor that results in the fragmented surveys that have been conducted to date. Most, if not all of them are implemented in a small scale, with different protocols, and in different timelines. This kind of small and exclusive survey might be sufficient to identify local issues and/or to monitor the achievements of project-based activities, but it could not provide sufficient information for the big picture of the overall migrant population in a province or in the country. Even if several surveys of this kind are available, the various methodologies and timelines usually discourage comparison and/or the triangulation of data as was also evident in this study.

It is recommended that PHOs call for a collective effort among all the relevant stakeholders working on migrant health issues in the province. An IBBS could be conducted jointly, and co-funded, between the PHO and NGO(s) working in the province. The tasks could be divided based on the strengths of each party. For instance, the PHO and public health facilities can be responsible for the biological survey while the NGO(s) could support the PHO by contributing to the pre and post test counselling and the behavioural component of the survey. This collective effort should be able to produce more systematic and reliable data, at least for local use.

Regardless of the types of future survey and the types of researcher, the survey protocol should be reviewed and modified to ensure that the design, methodology, research questions and indicator definitions are technically sound for use in the survey of migrant populations. For example; the sampling frame should cover all the major migrant labour sectors and geographic areas with large numbers of migrants rather than focusing on a certain group at a certain site that might not be able to represent the migrant population; the occupation variable needs to be defined in a more specific way relating to the context and characteristics of the migrant labour sectors in each province; the questions related to migration and associated risks for STI/HIV transmission during the migration process should be added to better understand whether the “hot spots” do exist and if so, where they are along the migration route. This will have to involve also a qualitative research method. Adjustment could be made to the survey protocol once the data trends support the modification.

In addition to a periodic SGSS, the routine health reporting systems should also be modified and improved. In this study, retrieval of STI data in migrant populations was extremely difficult because of a lack of systematic recording of services provided to this population. As identified in Chapter II, there are significant challenges in database systems and data reporting of the necessary information related to STI/HIV/AIDS in migrant populations. Enhancing the STI database is necessary to utilise in future HIV programmatic design and planning and is certainly one of the top priorities in migrant data system development.

The STI and HIV/AIDS reporting forms currently contain a lot of useful information, but yet, are insufficient for use among migrants. For example, the occupation category used in the forms are too broad, e.g. the “labourer”, to be used in the analysis and program planning and implementation. Although a lot of useful information is required in the forms, they are often incomplete. Discussions with PHO staff have identified that the purpose of the forms is to mainly fulfil the reporting requirements announced by the MOPH. They normally request only a few items

on the forms, and thus, there seems to be no need to fill the rest of the data on the form when the MOPH has never asked for it. They also mentioned that the MOPH hardly provides feedback on the data collected from the provinces and/or provide any guidance on how to make use of the data collected. Accordingly, through the provision of technical training and continuous support, responsible local staff should be trained on probing skills so that they can acquire more accurate data and be sensitised about the importance of accurate data collection, analysis and use. After all, the purpose of data collection should not only be to fulfil the requirements of the MOPH but also, or perhaps more importantly, to maximise its use for appropriate programme planning and implementation at the field level that can ultimately have an impact on the epidemic.

The PHAMIT assessment showed an interesting result which identified that a small number of Myanmar migrant workers in Samut Sakhon Province reported to have sex with Vietnamese and Cambodian sex workers, while some Cambodian migrants in Trat Province reported having sex with sex workers from Vietnam and Myanmar. Although small in number, this demonstrates the mobility dynamics and expanded networks of migrant sex workers within the Mekong Sub-region. The future surveillance system should be able to capture not only all key migrant labour sectors but also their source communities and their risks and vulnerabilities to HIV transmission in the past and present. If migrant characteristics and reference to STI and HIV/AIDS prevalence in source communities/countries can be made available, along with the prevalence and behavioural data at the transit and destination communities in Thailand, the planning and design for future HIV/AIDS programmes addressing migrants will be much more effective.

Enhancing the triangulation of relevant data on STIs/HIV/AIDS and mobility among implementing organisations at the provincial level

The study results demonstrate a compilation gap of existing STI/HIV/AIDS data as well as information related to programmatic responses already implemented by the government (i.e. PHO, hospitals, health centres) and local/international NGOs in each individual province. It is worth noting that there is a great pool of useful data and information that has been collected on the ground, but gathering this or making it available for timely use is an ongoing challenge. The local health authorities often lack knowledge of the activities implemented by NGOs and the surveys conducted by NGOs and/or academic institutes. On the other hand, many NGOs lack the intention and know how to work in close collaboration, or even to inform, the local authorities of their work, while some academia do not feel the need to coordinate with and/or to directly provide research findings to local authorities. Despite a long history of an established Provincial AIDS Committee in all the provinces in Thailand, there is a real lack of networking and collaboration among various stakeholders at the provincial level. This actually is also the case at the national level where a consensus on standardised indicators among various organisations and institutes has not been reached, although the multi-sectoral network has long been established. Therefore, collaboration and coordination, in addition to forming the network, is vital in developing a mechanism to access the existing data of each organisation as well as to use standardised indicators. This will eventually cultivate effectiveness in utilising relevant data to appropriately respond to HIV/AIDS issues in migrants at both national and provincial levels.

In doing so, the central authority may need to be involved by taking the lead in the development of standardised datasets, indicators and the survey and/or reporting timeline for HIV/AIDS in migrant populations at the national level. The standardised datasets and indicators should be designed to sensitise the current changes and context of migrant populations in Thailand. There is also a need for the central authority to fulfil its mandate as a technical support agency to provide adequate technical assistance to the provincial teams. In addition it is important to consider additional indicators that are essential for use at the provincial level, taking into consideration the local context of each province, and to perform the data compilation and triangulation. These need to follow the national standardised dataset and indicators of HIV/AIDS for the migrant population, which will also be a priority task for development and strengthening at the national level. A multi-sectoral stakeholders approach through the PHO's call for a collective response, as mentioned above, should also benefit information sharing among

all agencies working on HIV/AIDS programmes for migrants in the province. This is a very important first step for data compilation and triangulation within the context of local policy development and programme planning.

2. STIs/HIV/AIDS situation and programmatic responses

Despite the variety and fragmentation of STI/HIV/AIDS data available for the analysis in this study, some trends of the epidemics could be observed. Although a more rigorous dataset related to STIs/HIV/AIDS among migrant and related populations is urgently needed in order to appropriately develop future programmatic responses to this issue, the following recommendations could perhaps support the interim and longer-term solutions to this issue.

Future STIs/HIV/AIDS programming for migrants and host communities

It is noticed that in some particular coastal provinces such as Trat, Ranong, and Prachuap Khiri Khan, the HIV prevalence among migrant populations are two to eight times the prevalence in Thai populations. In particular, migrant fishermen are claimed to be at higher risk than migrants in other labour sectors as they are claimed to live and work in a more risky environment for STIs and HIV infection. In some port communities such as those in Samut Sakhon and Trat Provinces, where a large number of migrant men live, it is also common to find sex workers, both migrant and Thai. Several serological and behavioural surveys among migrant seafarers also indicated a relatively high level of HIV prevalence. However, considering the relatively high level condom use with sex workers reported in many provinces as found in this study; the highest number of HIV/AIDS symptomatic cases being reported among migrant “labourers” in most of the studied provinces (rather than the migrant fishermen); as well as the lack of STIs/HIV/AIDS information in other specific migrant groups; it is less convincing to conclude that migrant seafarers are the most-at-risk group among migrant populations.

Several studies recently conducted by the PHOs in land border provinces suggested that other migrant groups outside of the fishing industry may also be at risk for STIs and HIV transmission. For instance, a survey in Sa Kaeo Province in 2007 reported that about 60% of migrants had never used condoms when they had sex in Thailand, in addition to the report that one-third of those who experienced buying sex in Thailand had never used condoms with sex workers. Another survey in Nong Khai Province in 2006 found that about 17% of Lao migrant men had their sex debut with sex workers and only 30% of them used condoms; while only one-third of the surveyed migrants reported to use condoms in their last sexual interaction. However, given there is only one study with a small group of migrants in each province, it is difficult to justify prioritising these migrants as HIV/AIDS programme target population.

Another marginalised population in Thailand is the indigenous and ethnic populations. This study could not identify the provincial STIs/HIV/AIDS data related to these populations. However, some studies among ethnic groups in the north suggested that they might be one of the most vulnerable and high risk population groups in Thailand according to their low level of HIV/AIDS related knowledge, the tradition of pre and/or extramarital sex practices, and difficulties in accessing public health services due to lack of legal status, either as a Thai citizen or a registered migrant (Srithanaviboonchai 2002, Kobiri 2007). Fee-for-service seems to be the only way for them to utilise the health care services in Thailand and their poverty, therefore, limits their health access which in turn could increase their vulnerability. They also tend to discriminate PLHA more than Thai and migrant populations.

With the lack of comprehensive information on STIs/HIV/AIDS among migrants and other non-Thai populations, the limited resources, and the easier access to migrants in concentrated geographic areas like seaports and factories, there might be no choice for the programme implementers but to pick the “low hanging fruit”. Targeting particular high-risk migrant groups, such as sex workers and seafarers, is an important way to control the spread of HIV as well as to protect these vulnerable population groups from acquiring the infection. However, with the

lack of strong evidence, targeting certain groups can stigmatise other vulnerable populations and can be a miss-opportunity to reach other sub-group populations who might have equal or even higher risk and vulnerability. A broad programme for overall migrants has the advantage of reaching more migrants and the people with whom they interact. However, a broad programme may lose focus and require significant resources to reach a small number of individuals at most significant risk and have the greatest impact on reducing HIV epidemic. As migrants tend to be mobile across provinces in Thailand and/or move from one labour sector to another within the same province, HIV epidemics may rarely be confined to just one location and/or labour sector. Their mobility also implies that they are hard-to-reach, especially if they travel outside of the geographic confines of the existing programmes. In order to maximise the use of the limited human and financial resources, it is very crucial for the programme planners to get back to basics in better understanding who are the most-at-risk populations and how they are involved in the risky behaviours.

The biggest challenges for the programme planner are perhaps to consider whether to target or not to target certain populations and to do this with limited resources. Putting aside the lack of budget, it may be better not to be too specific with target groups within the migrant population if there is no clear evidence on who the high risk groups are. In addition to the small impact on the control of the HIV epidemic, if the programme happened to target inappropriate populations due to a lack of sufficient background information, it could also raise some ethical concerns. These concerns identify that certain populations could be seen as the “source” of HIV infection while those who should receive the programme services, but are not actually included in the programme’s target group, were not being reached. In addition to the sero-prevalence and behavioral data, it might be useful to take into consideration other factors surrounding HIV/AIDS issues among migrants. For example, it might be better not to target specific migrant population groups in a province like Samut Sakhon since the province only consists of three districts with small and concentrated urbanized geographical area but rather to try to reach as many migrants as possible in the province. Similarly, for a province like Ranong where the vast majority of migrants (about 90%) live and work in Muang Ranong District, it might be better to try to reach as many migrants in Muang District, regardless of their work sectors. The health authorities/facilities and NGOs working in other districts could focus more on periodic campaigns to raise overall community awareness on the issue and assist with monitoring the situation in other districts if priorities shift in the future. On the other hand, it would be cumbersome to attempt to cover the diverse migrant population groups employed in various labour sectors across different geographic areas in Trat Province. It may be more appropriate to try to focus on the most-at-risk migrant populations in the “hot spots” or “risk zones” in Trat Province. The primary obstacle is to find supporting evidence to inform decisions about who and where to target.

It is important to note that HIV/AIDS is a unique infectious disease with a long incubation period. Areas with higher numbers of reported symptomatic HIV/AIDS cases do not necessarily represent the areas with high risks or the hot spot or risk zone for HIV infection as patients might have long been infected in other areas prior to their migration. Particularly, if the areas with numerous symptomatic cases are border towns where significant border crossing takes place or alternatively areas where general hospitals with advanced medical services are located. It is important to further investigate if the actual risks for HIV transmission take place in the same areas where more symptomatic cases are identified. Experiences from implementing the cross-border HIV/AIDS programmes in the past have shown that not all the border towns are equal in terms of the risk for HIV transmission (FHI, 2006). While some border towns can be considered “hot spots” for HIV infection because of the risk behaviors conducted, some border towns report higher symptomatic cases because the patients try to return to their countries of origin when in poor health, and require medical treatment before they can safely travel across the border. Some such border provinces in Thailand such as Tak and Chiang Rai also receive quite a number of cross-border patients who do not live and/or work in Thailand but only cross the border to receive more advanced medical care (Srithamrongsawat, 2009). Regardless of nationality, and including Thais, patients usually tend to seek medical care from a more advanced health care facility than from a nearby clinic with limited capacity. This could contribute to the higher reported cases, particularly among migrants, in some major cities even though the majority of them live and work in other areas.

From this study, it appears that the overall pattern of HIV/AIDS epidemics among migrants in Thailand could be divided into four waves: 1) the old epidemic among migrant “labourers” who might have long been infected, even prior to their migration to Thailand as majority of them have been in Thailand for six to ten years, and have already developed signs and symptoms; 2) new infections among high risk persons i.e. male and female migrants who have unprotected sex while in Thailand; 3) female migrants who could be infected from their male partners, as up to half of the male migrants from Myanmar reported to have wives with them and many studied provinces reported much higher HIV infection rates in pregnant migrant women than Thais; and 4) children of HIV positive female migrants, as the high prevalence among pregnant migrant women is also evident in some provinces. It is important to provide HIV/AIDS information and prevention services to migrants, as well as to create an enabling environment to ensure risks and vulnerabilities to HIV infection are reduced to limit new infections. It is equally important to monitor older patterns of the epidemic in the “labourers” group that could contribute to new infections if they continue to practice unprotected sex with their spouses or other sex partners. Since some of the HIV/AIDS symptomatic labourers are female migrants, follow-up counseling and support for planned pregnancy and PMTCT are also essential.

There is a tradition of HIV transmission from high prevalence countries or populations to low prevalence countries/ populations. Whether the high HIV prevalence among migrants will affect the Thai population who have a lower prevalence depends on whether the two populations interact, particularly sexually. As the vast majority of migrants tend to live within the same social network of people from their country of origin, and given that a small number of migrants have Thai spouses, the main factors that could catalyse transmission between the Thai and migrant populations are likely to be through direct or indirect sex workers. Although the PHAMIT survey cited that most male migrants, mainly fishermen, liked to engage with sex workers of the same nationality, exceptions were observed among male migrants in Samut Sakhon, Phang Nga, Prachuap Khiri Khan and Tak Provinces where Thai sex workers were commonly engaged over the past year. Even though throughout these provinces the consistency of condom use is unknown, condom use during last sexual interaction among the surveyed male migrants seemed to be high. Despite the claims of the surveyed male migrants, significant concerns remain due to reports of very high HIV prevalence among Thai brothel-based sex workers. It is critical to ensure that safe sex is generally practiced among these populations. .

There were also reports from the surveys in 2004 and 2006 that clients frequenting migrant sex workers in inland border towns such as Mae Sot District in Tak Province, Aranyaprathet District in Sa Kaeo Province and Muang District in Mukdahan Province were Thais. The HIV prevalence among migrant sex workers in Sa Kaeo and Mukdahan Provinces were unknown. Since HIV prevalence among migrant sex workers in Tak Province was relatively high (4-8%), this population and their Thai clients are the additional population groups that may contribute to the epidemic from across-population groups.

A behavioural study in Mukdahan Province in 2006 found that the percentage of Thai sex workers who reported signs and symptoms of STIs was significantly greater than Lao nationals (10% v.s. 3-5%). However, considering there were much higher rates of condom use among Thai sex workers than migrants (72% v.s. 29%), it is possible that Lao sex workers in Mukdahan Province might be as vulnerable as Thais in the future, if not more, to HIV transmission if the level of condom use with their Thai clients remain unchanged.

This study also identified many reports of unprotected casual sex among migrants. Overall, only about one quarter of the surveyed migrants reported to have sex with casual sex partners. However, also only about one quarter of those who experienced sex with casual sex partners reported condom use during the last sexual act or regularly. Therefore, it is critical to promote universal condom use with all types of sex partners among this population. This does not only help prevent HIV among the general population, which is commonly considered a lower risk population, but it can also help reduce stigma and misconception towards condom use as an essential protection tool for transactional sex only. As seen in this study, condom use rates with sex workers were reported to be very high in most of the surveys.

Reinforcement of the outreach education and BCC programmes to reach more migrant populations more effectively

The most prominent HIV/AIDS programmes currently delivered to migrant populations in many provinces are outreach education for BCC and condom promotion. Some research studies such as the PHAMIT survey suggested that the more the migrant population is exposed to prevention services, the greater they adopted preventive behaviours such as condom use. However, considering case studies in Ranong, Tak, Phang Nga and Trat Provinces, as described in the previous chapter, the number of targeted migrants reached by the current prevention programmes are still extremely limited in comparison to the number of registered migrants in these provinces. Not to mention the huge estimated numbers of both registered and unregistered migrants in the provinces. Besides this, some specific groups who would be at risk of contracting HIV such as labourers in the agricultural sector and construction sites may not be able to benefit from the existing prevention programmes implemented in their respective areas. This is because most of the programmes target migrants in fishing and related industries as well as sex workers. To ensure the impact of programme implementation, there is an urgent need to scale up programme coverage in all priority sites. In so doing, policy and budget supports are needed, particularly for the work on the side of the government as the current HIV/AIDS programmes targeting migrants are mainly implemented by NGOs and funded by international donors. With the change of Thailand's economical status to a middle-income country, it is very likely that funding from international donors will cease in the near future. It is very critical for the Thai government to start investing on this matter now to avoid programme gaps as the donor funding priorities shift.

Many recent studies revealed that migrant workers, particularly women, lacked knowledge on STIS/HIV/AIDS and their condom use was considerably low or even found to be declining in some specific areas such as Mukdahan Province. Female migrants also tend to have less opportunity to participate in HIV/AIDS education activities. It is important to note that the proportion of female migrants in Thailand continues to grow and some provinces such as Tak reported to have a higher number of females than male migrants. To implement a gender-balance and gender-sensitive programmes that reduce vulnerability and ensure female migrants are protected and treated with equity future HIV/AIDS programmes for migrants should place greater emphasis on female migrant groups while continuing to simultaneously enhance the programmes for male migrants.

The observed high levels of syphilis and HIV/AIDS found in migrant populations in many provinces reflect the high risk of unsafe sex practice among this population. Many studies revealed that male migrants often visit sex workers. Migrant workers in coastal areas, in general, were more likely to visit sex workers than migrant workers in land border provinces such as Tak. While the condom use rate among sex workers in coastal provinces tended to increase or remain stable, perhaps because of the existing prevention programme in these areas, the land border provinces such as Chiang Rai and Mukdahan reported the declining rates in 2005-2006. However, condom use rates with casual sex partners were extremely low in all migrant groups including seafarers.

Several surveys reported that the main source of HIV/AIDS information among most migrants were friends and mass media, i.e. television and radio. Although it is well accepted that face-to-face discussions are one of the most effective ways to deliver BCC, it might do more harm than good to let them receive information from their friends since their level of HIV/AIDS knowledge were observed to be at the low to moderate level and misconceptions could expand among them. Although peer education is well recognized as one of the most effective ways to access hard-to-reach populations including migrants, one should ensure that the peer educators are equipped with thorough knowledge and skills for BCC in order to prevent any adverse outcomes of peer education. On the other hand, the use of mass media relevant to migrant culture in migrant languages should be strengthened as it could reach a broad range of audiences. In particular, the mass media might be a strong tool for the HIV/AIDS information dissemination in the areas where various migrant groups in a broad geographic area should be reached such as a scattered agricultural farm setting. However, it has some limitations especially in providing precise and detailed information to the audience and in demonstrating skills

for correct condom use. Also, it might not be cost-effective for programmes targeting specific migrant groups in specific geographical areas since mass media is a costly means for communication.

Apparently, the numbers of condoms distributed to the targeted migrants, as portrayed in the mentioned case studies, look promising in some provinces. Nevertheless, further analysis of the data strongly suggests a tremendous need to improve this service. While data on the number of condoms distributed in Tak and Prachuap Khiri Khan Provinces are not available, the data in Phang Nga and Ranong Provinces show that on average the programme only provide one-two condoms per person per year. Even in the provinces where the number of condoms distributed was reported to be very high like Samut Sakorn and Trat, each target migrant could receive only one-two condoms per month on average³. In addition, there was no evidence at this time to demonstrate how effective the condom distribution programmes were or what the impacts have been on the target groups, particularly in use with partners other than brothel-based sex workers. Enhancing outreach education, with a focus on universal condom use in all sexual interactions among all types of sex partners is essential to reach those who need them. In addition, a systematic mechanism for monitoring and evaluating programme implementation should be developed to measure the effectiveness of the programme.

Complex networks between migrants and other populations may place less vulnerable people at risk of the disease, either they be migrants or Thais. Because migrants often mobilise within and across the provinces in Thailand, HIV and safe mobility programmes could be more effective if they take a regional and national focus. The PHAMIT Project is a good start in initiating a “networked programme” by focusing on migrants in fishing and related industries in several seaport areas of Thailand. However, more efforts are needed to ensure linkages between the current programme implemented in multiple sites as well as to establish a new “networked programme” and/or expand the current programme to cover more key migrant groups. In addition to ensuring a standardised quality and type of service provided, another key factor to ensure the success of the “networked programme” is the promotion of services in other sites where targeted migrants may move, even though the services are provided by different agencies or organisations. This may not only benefit the seafarers and sex workers, whose mobility and turnover rate were reported to be very high, but it also benefits mobile populations in other sectors. Chain-referral mechanisms should be established across all programme sites in Thailand in order to strengthen this franchising health service.

Development and improvement of HIV/AIDS and healthcare service deliveries to migrant population

The programme for migrant workers which are least implemented is healthcare services. Currently, services such as VCT, STIs and OIs treatment delivered to this group are limited. It is true that the provision of healthcare services demands a lot of human and financial resource capacity in service deliveries to the migrant population, which currently are still limited. However, specific healthcare service programmes responding to HIV/AIDS such as reproductive health, VCT, STIs and OIs are essential for immediate prevention and control strategies. This is particularly the case given the fact that the current HIV prevalence among migrant populations in many provinces is increasing or still constantly high.

Infection trends in pregnant migrant women were found to be gradually increasing in some provinces, while steadily persistent in others; this urges the government to consider effective strategies that handle the issue of PMTCT among migrants. Though some of the studied provinces are noted to have already expanded the PMTCT

³ The calculation for Trat Province is 8,428 registered migrants / 180,000 pieces of condom distributed.

The calculation for Samut Sakorn Province is 7,300 targeted migrants / 120,000 pieces of condoms distributed.

to provide ARV drug to pregnant migrant women, the programme coverage is still extremely limited. Since providing ART to HIV positive mothers has proven to be a highly cost-effective way to prevent HIV transmission in newborns and that inexpensive ARV drugs are already available at health facilities, it could be considered an unethical practice if medication is not provided to migrant mothers because of their lack of legal status. There is urgent need for the government to set a policy inclusive of pregnant migrant women in the available PMTCT service programme. This would favour basic human rights and humanitarian assistance as well as alleviating any long-term HIV/AIDS burden to the country. HIV/AIDS outreach education and reproductive health programmes should include PMTCT information to migrants in general as well as migrant couples to ensure greater awareness and knowledge of child bearing amidst the HIV/AIDS epidemic. This is because most surveys confirmed the low level knowledge of mother-to-child transmission and its prevention.

Despite the incomplete STI data in the studied provinces for this review, the results of medical examinations during the registration process suggest that syphilis prevalence among migrant workers in a number of studied provinces was rising between 2005 and 2006. This implies the presence of an STI epidemic in migrant communities and the challenge in combating it since the increased prevalence in the same population pool indicates new infections, uncured cases, or recurrence of the infection. Given the estimation that there are at least as many migrants who live and work in Thailand who have not undertaken the registration process, the real situation might be much worse than the observed studies as many STI patients may not be able to access appropriate treatment due to a lack of accessibility. As opposed to migrant sex workers who nowadays gain more attention from public health agencies and NGOs, other migrant groups may find utilising the existing STI treatment services difficult. This may be due to the fact that the service is not accessible to them or they feel reluctant to go to a specific service delivered to a special group such as sex workers.

The current STI services and treatment programme is noteworthy of its weaknesses. Because of the shortfall of the MOPH's budget as well as the health reform and the organisation re-structure, STI clinics in most provinces have been shut down. This has already paid a significant price as evidenced by the returned trend of STIs observed among the Thai population in many provinces nationwide. Thus, strengthening STI treatment services and making them available and accessible will be a key strategy in future STI programmes for both Thai and migrant populations.

Introduction of the continuum from prevention to care, treatment and support for migrant population

As evident in the reports from many provinces in this study, a number of migrants have already developed HIV/AIDS signs and symptoms. It may be ideal for migrants who developed signs and symptoms to return home to their families in their countries of origin. But since the majority end up becoming migrants due to poverty and a lack of earning capacity, and their health care systems are often less developed compared to Thailand, returning to their hometowns is likely to worsen their health conditions. Furthermore, since HIV/AIDS is a chronic disease, many people are still productive after recovering from illness. This could encourage symptomatic HIV/AIDS migrants to continue to live and work in Thailand and they may or may not adhere to the treatment protocols as well as the preventive practices for HIV transmission. Therefore, it is important for health authorities and relevant NGOs to follow up symptomatic HIV/AIDS migrants not only to provide care and support as needed but also to encourage positive prevention.

In doing so, the continuum from prevention to care, treatment and support for migrants might be an effective approach. There is no doubt it is difficult to expect a full scale continuum to be available for migrants, and in fact there might not be a real need to establish the continuum of such services for migrants per se. However, a strong network of currently available HIV/AIDS services at the local level should at least be strengthened. It is important for the local health authority to take the lead in coordinating public and private partnership to leverage existing but limited resources. A map of existing services, their geographic coverage and target beneficiaries should be conducted at the local level to identify if there is any duplication or gaps of services across the

continuum. Through a series of participatory consultations, the local implementers should manage to agree upon the expansion and/or modification of their services. They should build upon the strengths of each agency to ensure that all components of the continuum of services are made available without duplication. For instance, while government health facilities concentrate their effort on care and treatment, they could spend their health prevention and promotion budget to support NGOs or community-based organisations (CBOs) to conduct outreach as the NGOs/CBOs are usually more efficient in community outreach. The NGOs/CBOs could also refer any target beneficiaries who require institutional health services to the government health facilities. On the other hand, the health facilities could refer the patients to NGOs/CBOs for follow up in the community to ensure the treatment compliance. The role of NGOs/CBOs is essential as government health personnel have a limited capacity to work outside of the facilities and to provide continuous care and support to migrants.

Establishment of and/or strengthening the provincial, national and regional networks on safe mobility and HIV/AIDS

One of the strengths of the Thai health care system is the presence of a large number of NGOs working on health related programmes, including HIV/AIDS for migrants. Sharing their experiences and lessons learned about effective strategies; programme implementation, achievements and obstacles; and the programmatic gaps they encounter could contribute to an improved planning of provincial strategies to tackle HIV/AIDS. As mentioned earlier, the Provincial AIDS Committee may need to be reviewed and revised to ensure comprehensiveness and the effectiveness of its terms of reference, scale and scope of work, agenda, membership and the outputs/outcomes. If needed, a working group at the provincial level could also be established and/or strengthened to specifically look into the design and implementation of the HIV/AIDS programmes for target populations, whether they are Thai or migrants. Mutual partnership and strong commitment are required among the committee/working group members to ensure group function. Strong leadership from relevant agencies, particularly the PHO, is essential to achieving this.

Strong leadership and advocacy require government involvement, especially in destination countries that typically give low priority to foreigners, particularly when they are undocumented migrants. However, Thailand is an exceptional case. In the past few years, migrants have been recognised by the MOPH as a key population group that requires special attention. The migrant population group falls within other most-at-risk populations such as sex workers, men who have sex with men and injecting drug users. The MOPH has been taking the lead in establishing and strengthening the national network of government and non-government agencies working on HIV/AIDS among migrants. This is also the case in developing a national HIV/AIDS master plan that addresses the need to work with mobile and migrant populations. However, it is still a big challenge for the national network to collectively implement and monitor the output/outcomes of the agreed set of strategic plans and indicators.

As many migrants often cross the border, it is also very important to strengthen cross-border collaboration. Ideally, the National AIDS programme in source and destination countries should work together and should include HIV prevention, care and support for mobile populations. This will result in broader level reach to widely scattered target groups who are potential migrants in the source community. It will also target migrants in transit and destination communities. Bilateral and multilateral cooperation between Thailand and sending countries, as well as regional forums such as ASEAN, should be tapped into as a means to advocate for a regional health system and service development at the source, transit and destination communities.

3. Conclusion

Evidence-based programming is essential to maximize the limited human and financial resources available to the migrant health programme, including the HIV/AIDS programme. This would ensure that the limited resources are utilised in a way that any investment could bring the greatest impact to the reduction of the

epidemic. However, Thailand has a huge gap in evidence, which is a fundamental pillar for programme design, planning, implementation, monitoring and evaluation. Although a number of routine serological, behavioural surveillance and ad hoc surveys have been implemented to date, the findings derived from these sources are often fragmented. This is particularly due to the difficulty in obtaining various valuable data owned by different agencies. It is very difficult to draw a conclusion based on the existing information systems. For instance, all of the surveys could tackle the types of risks migrants engaged in, such as unprotected sex behaviour with different types of sex partners. However, they hardly tackled the “where” and “with whom in particular” the risk practices took place. Most, if not all, of the existing studies present findings from basic descriptive and/or univariate analysis of the rich amount of data collected. However, the bivariate and multi-variate analysis could be helpful in drawing a clearer picture of the situation. In addition, there are so many migrant groups that have not been surveyed, even though there are some reports suggesting that they might also be at risk for HIV transmission and/or contributing to the local epidemic.

Accordingly, this study has to analyse and make recommendations based on the limited evidence, including the gray literature. It should also be kept in mind that further analysis should be implemented when additional information is obtained. The limited availability and access to existing data hinders a more thorough analysis to inform the development of appropriate recommendations for future HIV/AIDS programming that targets migrants in the studied provinces. However, in addition to the suggestions proposed from the available data, it is anticipated that this study could also demonstrate the methodology used, in particular the triangulation of both biological and behavioral data on STIs and HIV/AIDS as well as the information drawn upon about the programmatic response. Although the enhanced IBBS is preferred in obtaining evidence for a stronger programme response, the triangulation of existing data from different sources can be used in the meantime or when IBBS resources and capacity is limited. It is hoped that health authorities, at both local and national levels, could adapt the methodology and lessons learned from this study to conduct data triangulation on a regular basis and feed the findings into future programme development.

At present, the HIV/AIDS programmes for migrants can only reach a small group of those at risk of HIV transmission. To ensure that the programmes have an impact on the HIV/AIDS epidemic, they need to operate on a large enough scale to effectively reach the diverse migrant populations. There are several factors to consider when developing the programme. One should not assume that: migrants are all the same; that migrants from neighbouring countries only concentrate in the border areas close to their countries (as it is evident that about one-third of migrants in Trat Province located on the Thai-Cambodian border are from Myanmar); and that migrants from different cultural backgrounds who work in the same labour sector and the same geographic areas have the same risk and vulnerability to HIV infection. A population-based approach that targets specific migrant population groups will only be effective in controlling the HIV epidemic if the most-at-risk or high risk migrant groups can be accurately identified. However, an area-based approach may be more appropriate to reach diverse migrant groups as well as the groups with unknown risks.

While migrants are found in all 76 provinces of Thailand, the HIV/AIDS programme for migrants is not yet implemented nationwide, but concentrated in selected migrant-populated towns in specific provinces, particularly those along the border. Despite the fact that many migrants pass through these border provinces to further migrate into the inner cities of Thailand, current programmes tend to focus on migrants who remain in the targeted areas long term. At present, Thailand does not have the resources to implement the HIV/AIDS programme to reach migrants across the whole nation, even though the number of migrants residing outside border provinces outweighs the number of migrants in the border areas. There is an urgent need to develop a strategic channel that is able to reach as many migrants in border transit areas before they place themselves at greater vulnerability risk of catching the virus in the inner cities where there is no HIV/AIDS programme for them.

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Appendix



APPENDIX

A1. Summary of Geographic and Economic Characteristics of the 10 Studied Provinces

Region	Province	Geographical Characteristics	Neighboring Country	Number of Districts	Total Land Area (sq. km.)	GPP Per Capita 2005 (Baht/year)	Major Source of Income ¹
Central	Samut Sakhon	Coastal province	Not applicable	3	1,004	494,635	Manufacturing; fishing; wholesale and retail trade; electricity, gas and water supply; and transport, storage and communications
	Prachuap Khiri Khan	Land border and coastal province	Myanmar (Mueik Province, Tanintharyi Division)	8	6,368	92,387	Manufacturing; agriculture, hunting and forestry; wholesale and retail trade; hotels and restaurants; and transport, storage and communications
North	Chiang Rai	Inland border province	Myanmar (Shan State), Lao PDR (Bokeo and Oudomxai Provinces)	18	11,678	35,109	Wholesale and retail trade; and agriculture, hunting and forestry; education
	Tak	Inland border province	Myanmar (Kayin State)	9	16,407	55,852	Agriculture, hunting and forestry; manufacturing; wholesale and retail trade; and mining and quarrying
Northeast	Mukdahan	Inland border province	Lao PDR (Savannakhet Province)	7	4,375	27,784	Agriculture, hunting and forestry; wholesale and retail trade; education; and manufacturing
	Nong Khai	Inland border province	Lao PDR (Mientiane Province)	17	7,332	26,215	Agriculture, hunting and forestry; wholesale and retail trade; education; and manufacturing
East	Trat	Land border and coastal province	Cambodia (Battambang, Pursat and Ko Kong Provinces)	7	2,819	67,605	Fishing; agriculture, hunting and forestry; wholesale and retail trade; and transport, storage and communications
	Sa Kaeo	Inland border province	Cambodia (Banteay Meanchey and Battambang Provinces)	9	7,195	32,746	Agriculture, hunting and forestry; wholesale and retail trade; and public administration and defense
South	Phang Nga	Coastal province	Not applicable	8	4,171	104,053	Agriculture, hunting and forestry; wholesale and retail trade; education; and manufacturing
	Ranong	Land border and coastal province	Myanmar (Kawthaung Province)	5	3,298	78,856	Fishing; agriculture, hunting and forestry; and wholesale and retail trade

Source: Gross Regional Product and Gross Provincial Product (GRP and GPP, 2005 Edition) by Office of the National Economic and Social Development Board.

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A2. Number of Migrant Workers with Work Permits in Chiang Rai Province, 2004-2007

Source of Origin	Number of Migrant Workers with Work Permits			
	2004	2005	2006	2007
Myanmar	12,447	12,543	12,787	10,131
Lao PDR	604	516	282	87
Cambodia	10	2	5	3
Total	13,061	13,061	13,074	10,221

Source: Chiang Rai Provincial Health Office

A3. Number of Registered Migrant Workers in Nong Khai Province, 2004-2006

Source of Origin	Number of Registered Migrant Workers				
	2004	2005	2006		
			Male	Female	Total
Myanmar	N/A	N/A	10	22	32
Lao PDR	N/A	N/A	379	965	1,344
Cambodia	N/A	N/A	4	4	8
Total	1,657	1,035	393	991	1,384

Source: Nong Khai Provincial Health Office

A4. Number of Registered Migrant Workers in Mukdahan Province, 2003-2007

Source of Origin	Number of Registered Migrant Workers														
	2003			2004			2005			2006			2007		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Myanmar	3	1	4	5	2	7	3	5	8	6	5	11	4	4	8
Lao PDR	170	477	647	483	900	1,383	300	700	1,000	254	579	833	181	399	580
Cambodia	0	1	1	0	5	5	2	4	6	0	3	3	0	2	2
Total	173	479	652	488	907	1,395	305	709	1,014	260	587	847	185	405	590

Source: Mukdahan Provincial Health Office

A5. Number of Registered Migrant Workers in Phang Nga Province in 2002-2006

Source of Origin	Number of Registered Migrant Workers														
	2002			2003			2004			2005			2006		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Myanmar	6,077	2,039	8,116	4,698	1,666	6,364	15,811	660	22,571	11,732	5,159	16,891	11,102	5581	16,683
Lao PDR	13	8	21	11	8	19	150	32	182	46	28	72	46	19	65
Cambodia	5	1	6	0	0	0	9	5	14	2	0	2	0	1	1
Total	6,095	2,048	8,143	4,709	1,674	6,383	26,165	6,788	32,953	11,780	5,159	16,939	11,148	5,581	16,729

Source: Phang Nga Provincial Office of Employment, Ministry of Labor

A6. Number of Registered Migrant Workers in Prachuap Khiri Khan Province, 2004-2006

Source of Origin	Number of Registered Migrant Workers								
	2004			2005			2006		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Myanmar	6,703	2,827	9,530	5,218	2,650	7,868	4693	2772	7465
Lao PDR	501	276	777	262	200	462	177	141	318
Cambodia	965	65	1,030	472	27	499	236	41	277
Total	8,169	3,168	11,337	5,952	2,877	8,829	5,106	2,954	8,060

Source: Prachuap Khiri Khan Provincial Health Office

A7. Number of Registered Migrant Workers in Ranong Province, 2004-2007

District	Number of Registered Migrant Workers		
	2004	2005	2007
Mueang Ranong	43,099	48,974	47,007
Kra Buri	6,801	7,293	5,961
Kapoe	2,088	1,914	1,245
La-un	2,357	2,785	2,083
Suk Samran	761	929	878
Total	55,106	61,895	57,174

Source: Ranong Provincial Office of Labor

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A8. Number of Registered Migrant Workers in Samut Sakhon Province, 2004-2006

Source of Origin	Number of Registered Migrant Workers								
	2004			2005			2006		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Myanmar	38,882	34,616	73,498	34,771	34,684	69,455	45,912	43,490	89,402
Lao PDR	2,212	2,534	4,746	1,935	1,836	3,771	927	772	1,699
Cambodia	991	429	1,420	452	218	670	270	180	450
Total	42,085	37,579	79,664	37,158	36,738	73,896	47,109	44,442	91,551

Source: Samut Sakhon Health Office

A9. Number of Registered Migrant Workers in Tak Province, 2003-2006

Source of Origin	Number of Registered Migrant Workers											
	2002			2003			2004			2005		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Myanmar	21,207	29,045	50,252	11,731	20,250	31,981	37,861	50,775	88,636	36,263	64,834	101,097
Lao PDR	11	9	20	12	16	28	29	14	43	85	44	129
Cambodia	10	11	21	14	13	27	24	14	38	19	20	39
Total	21,228	29,065	50,293	11,757	20,279	32,036	37,914	50,803	88,717	36,367	64,898	101,265

Source: Tak Provincial Office of Employment

A10. Number of Registered Migrant Workers in Trat Province, 2003-2006

Source of Origin	Number of Registered Migrant Workers											
	2003			2004			2005			2006		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Myanmar	1,394	680	2,074	2,821	1,218	4,039	2,267	1,096	3,363	1,814	986	2,800
Lao PDR	29	9	38	141	56	197	65	37	102	33	23	56
Cambodia	2,226	1,381	3,607	7,955	3,543	11,498	5,472	3,080	8,552	3,433	2,139	5,572
Total	3,649	2,070	5,719	10,917	4,817	15,734	7,804	4,213	12,017	5,280	3,148	8,428

Source: Trat Provincial Health Office

A11. Summary of Key Data on STIs/HIV in Migrant Populations in the 10 Studied Provinces, 2002-2006

Indicator	Interested Group	Trat	Samut Sakhon	Prachuap Khiri Khan	Sa Kaeo	Tak	Chiang Rai	Nong Khai	Mukdahan	Ranong	Phang Nga
Number of migrant population	Registered migrant workers	7,519-15,734	79,664-114,568	8,829	None	32,036-101,265 (Highland)	10,221-13,074	1,035-1,657	590-1,395	55,106-61,895	6,383-32,953
	Indigenous and ethnic populations	None	None	None	None	157,980 (Highland)	178,287 (Highland)	None	None	412 (Sea gypsy)	2,659 (Sea gypsy)
	Refugees	None	None	None	None	73,184	None	None	None	None	None
HIV sero-prevalence	Displaced Thais from Myanmar	None	None	None	None	No Data	None	None	None	47,735	None
	Female sex workers ¹	23-25%	No Data	No Data	No Data	4-8%	No Data	0-7%	No Data	7-36%	No Data
	Fishermen	2-8%	No Data	0.0%	No Data	No Data	No Data	No Data	No Data	3-10%	No Data
	Overall migrant workers	No Data	1-3%	0.0%	0.1%	2-3%	No Data	No Data	No Data	1-2%	No Data
STIs prevalence	Pregnant women ²	1-9%	0.1%	1-3%	1-3%	2-3%	No Data	0-7%	No Data	1-2%	No Data
	Overall migrant workers ³	0.3-1%	0.1-0.4%	0.1-0.5%	No Data	0.7-0.9%	No Data	No Data	No Data	0.3-0.9%	0.4-0.7%
Condom use in the last sex	Female sex workers	No Data	0.5-0.6%	No Data	No Data	No Data	No Data	No Data	3-5%	6-9%	No Data
	Overall migrant workers ⁴	95.5%	94.1%	94.1%	No Data	50.0%	No Data	32%	No Data	96.8%	78.6%
	Female sex workers	No Data	No Data	93-94%	No Data	No Data	83-84%	87-100%	29%	No Data	No Data

Remarks: Statistics in most cells are presented in a range of minimum-maximum values.

- HIV sero-prevalence of all provinces represents brothel-based sex workers except Nong Khai that the data included both brothel-based and non brothel-based sex workers.
- From Perinatal HIV Intervention Monitoring System (PHIM) annual reports of women giving births except Nong Khai the data were collected from sentinel surveillance surveys implemented at antenatal care clinic.
- From medical examination during work permit application.
- The last sex with sex workers from PHAMIT 2004 baseline survey except Nong Khai that the data were collected from the most recent survey by the Provincial Health Office



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