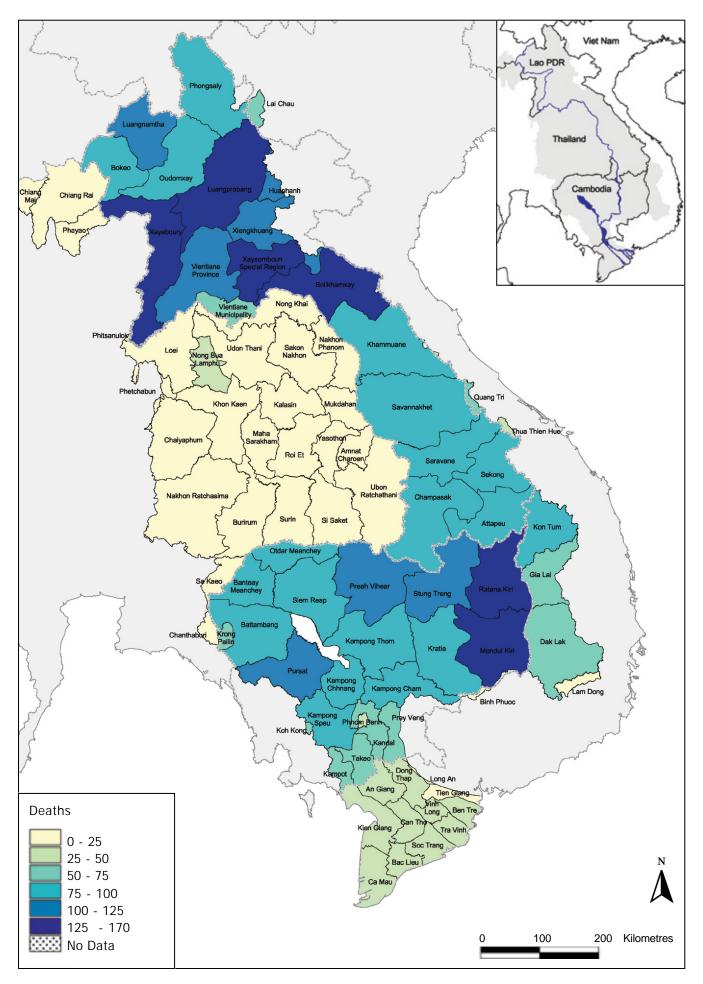


# Health Maps

Map 32:	Infant Mortality Rate	90
Map 33:	Child Malnutrition	92
Map 34:	Male Life Expectancy	94
Map 35:	Female Life Expectancy	96
Map 36:	Total Fertility Rate	98
Map 37:	Malaria	100
Map 38:	HIV/AIDS	102

# Deaths in one year per 1,000 live births



# Map 32: Infant Mortality Rate

#### Deaths in one year per 1,000 live births

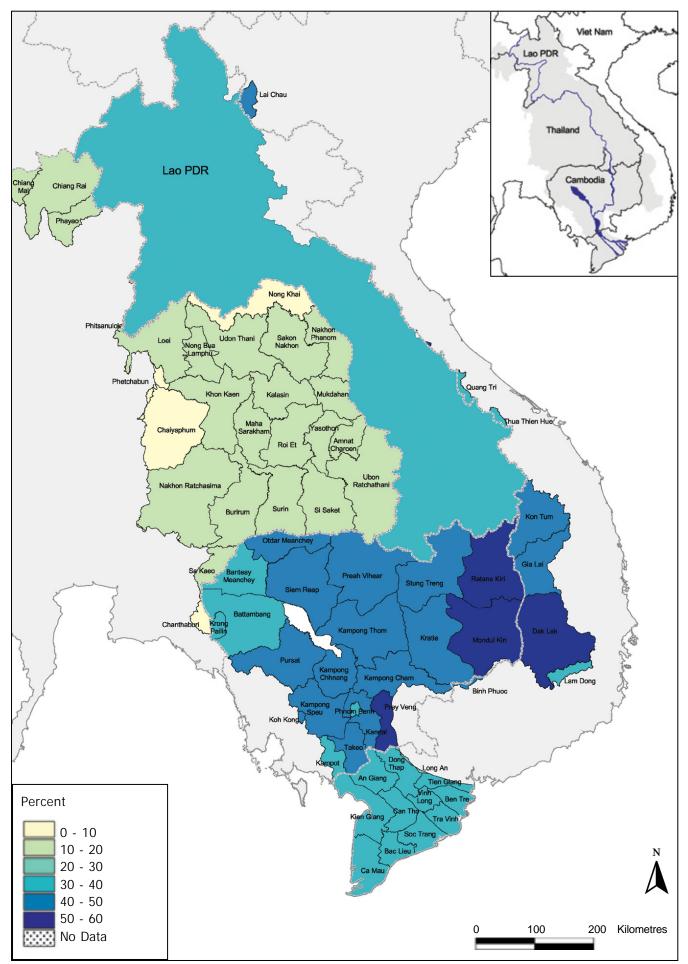
The numbers of infants who die in the first year of life are extremely high in Cambodia and Lao PDR, ranging from 75 to over 125 deaths per 1,000 live births. Although important reductions occurred during the 1990s, the infant mortality rates in these countries remain significantly above the regional average for the East Asia and the Pacific of 34 deaths per 1,000 live births (UNDP 2002).

The factors influencing these rates include low birth weights; diseases such as diarrhoea, dysentery and malaria; and poor access to adequate health services. Infant mortality rates are substantially higher in remote, rural areas than in urban areas.

In Thailand and the Mekong Delta of Viet Nam, infant mortality rates are lower than the regional average. Nonetheless, the rates in the Northeast and North regions of Thailand are twice the rate in Bangkok (Dennis 1997). The regional rate for the Central Highlands is almost twice as high as that for the Mekong Delta (UNDP-Viet Nam 2001).

Country	Indicator Definition	Source	Table
Cambodia	Number of deaths of children under one year of age during a year per 1,000 live births (1998)	Population Census 1998	РорМар
Lao PDR	The probability of dying between birth and one year of age, expressed per 1,000 live births (1995)	Population Census 1995	
Thailand	Infant deaths per 1,000 live births (1997)	Ministry of Public Health 1997	
Viet Nam	Infant mortality rate (1999)	Viet Nam Human Development Report 2001	Table 7

# Proportion of children underweight for age



# Map 33: Child Malnutrition

#### Proportion of children underweight for age

The proportion of children under age 5 who are underweight for their age group is over 30 percent throughout the LMB, except in Thailand. In many remote upland and ethnic minority areas, more than half of the children suffer from malnutrition.

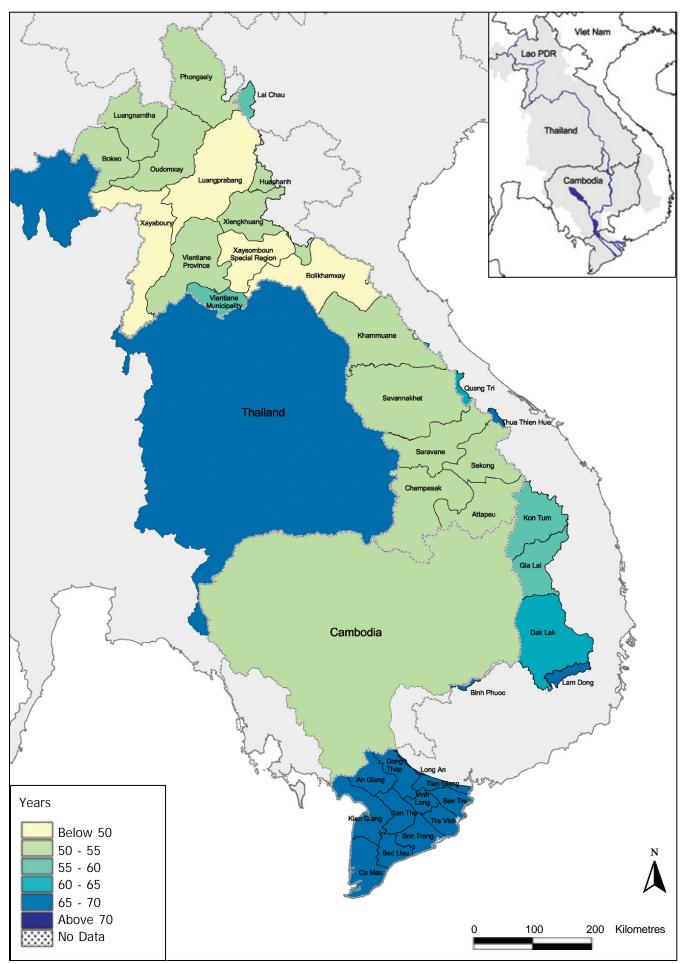
In the Korat Plateau and the North region of Thailand, child malnutrition rates are generally less than 20 percent, although these rates are more than double the national rate of less than 10 percent.

Child malnutrition is closely related to high levels of poverty. Declines in child malnutrition often follow reductions in poverty. In Viet Nam, for example, child malnutrition rates decreased from 45 percent in 1994 to 33 percent in 2000. During this same period, the national poverty rate declined approximately 20 percentage points.

Country	Indicator Definition	Source	Table
Cambodia	Percentage of children more than two standard deviations below the mean weight for a healthy reference population (2000)*	Health Survey 2000	Table 15
Lao PDR	Proportion of moderately underweight children under 5 years (1999)	Lao PDR Human Development Report 2001	
Thailand	Percentage of children suffering first-degree malnutrition (1996)	Ministry of Public Health 1996	
Viet Nam	Underweight children under 5 years old (1998)	Viet Nam Human Development Report 2001	Table 2

\* The data source amalgamates the provinces of: Battambang and Krong Pailin; Kampot, Kep and Sihanoukville; Preah Vihear, Stung Treng and Kratie; Mondul Kiri and Ratana Kiri; and Siem Reap and Otdar Meanchey.

# Expected length of life for males



#### Expected length of life for males

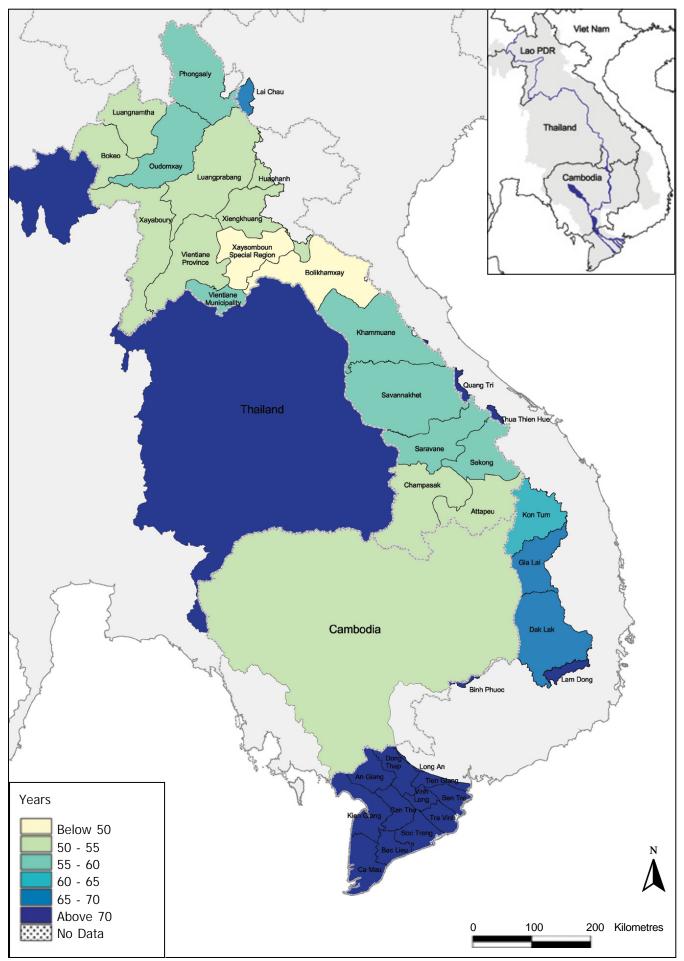
Life expectancy among men in the LMB varies widely. In Cambodia and Lao PDR, men tend to live less than 55 years. In Thailand and Viet Nam, men live 10 to 15 years longer, although the average is lower in the Central Highlands.

Men in cities tend to live longer than men in rural areas. For example, male life expectancy in Vientiane Municipality is 57 years, compared with 47 years in a very remote province such as Xaysomboun Special Region.

Low life expectancy levels reflect, among other factors, poor health conditions. High incidence of malaria and other diseases, combined with the lack of adequate health services, are problems affecting life expectancy throughout the LMB.

Country	Indicator Definition	Source	Table
Cambodia	The number of years a male would live if prevailing patterns of age-specific mortality rates at the time of birth were to remain constant (1999)	ADB Key Ind. 2001	Table 2
Lao PDR	The number of years a male would live if prevailing patterns of age-specific mortality rates at the time of birth were to remain constant (1995)	Population Census 1995	
Thailand	The number of years a male would live if prevailing patterns of age-specific mortality rates at the time of birth were to remain constant (1999)	ADB Key Ind. 2001	Table 2
Viet Nam	Average life expectancy for a male (1999)	Viet Nam Human Development Report 2001	Table 3

# Expected length of life for females



#### Expected length of life for females

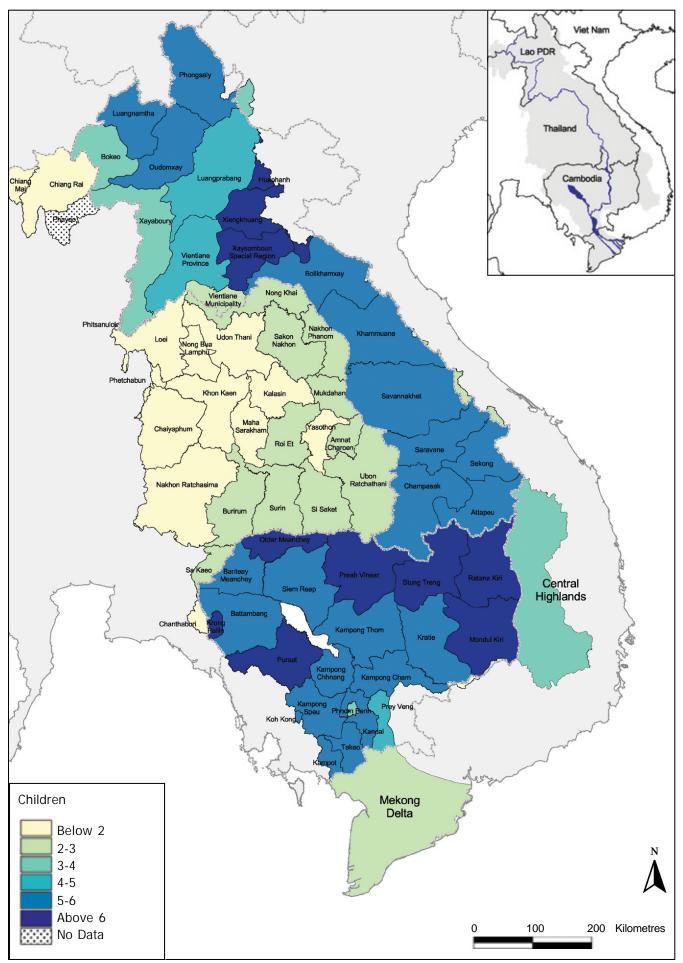
Women in the LMB typically live 4 to 6 years longer than men. In many provinces, the difference is greater. In Ben Tre in the Mekong Delta, for example, the difference between male and female life expectancies is almost 10 years. Throughout the world, women tend to live longer than men for a variety of reasons, but the phenomenon is especially pronounced in parts of the LMB because of wars that have left more men than women dead.

Despite differences between the sexes, variations between female lifespans across the basin generally mirror those for men. As with males, female life expectancies are lowest (around 50 years) in the provinces of Xaysomboun Special Region and Bolikhamxay in Lao PDR. They are also generally low (55 or below) throughout much of the rest of Lao PDR and Cambodia.

Provinces with the highest female life expectancies are found in the Mekong Delta, followed by Thailand (for which provincial data is unavailable) and the Central Highlands.

Country	Indicator Definition	Source	Table
Cambodia	The number of years a female would live if prevailing patterns of age-specific mortality rates at the time of birth were to remain constant (1999)	ADB Key Ind. 2001	Table 2
Lao PDR	The number of years a female would live if prevailing patterns of age-specific mortality rates at the time of birth were to remain constant (1995)	Population Census 1995	
Thailand	The number of years a female would live if prevailing patterns of age-specific mortality rates at the time of birth were to remain constant (1999)	ADB Key Ind. 2001	Table 2
Viet Nam	Average life expectancy for a female (1999)	Viet Nam Human Development Report 2001	Table 3

# Average number of children a woman bears in her lifetime



# Map 36: Total Fertility Rate

#### Average number of children a woman bears in her lifetime

The number of births is high among women in Cambodia and Lao PDR, averaging 5 children. Fertility rates are higher in rural areas than in urban areas. Women in remote upland regions often have more than 6 children. In Phnom Penh and Vientiane Municipality, however, fertility rates are 3.7 and 2.4 children per woman respectively.

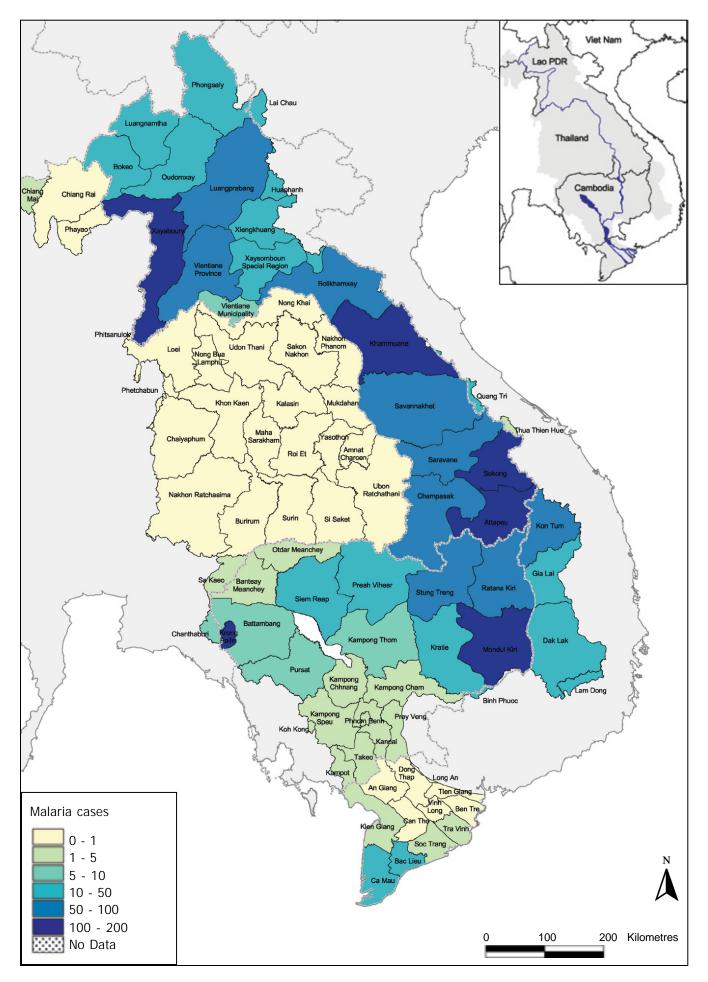
High fertility rates are associated with lower literacy rates and levels of educational attainment among rural women. Ethnic minority women and women working in the agricultural sector also tend to have higher than average fertility rates.

In Thailand and Viet Nam, fertility rates have dropped significantly in recent years due to successful government birth spacing programmes, better reproductive health services and higher education levels among women. As a result, the fertility rates in these portions of the LMB are below or near the replacement level of 2.1 births per woman.

The fertility rate for the Central Highlands of Viet Nam is 3.9, much higher than 2.1 for the Mekong Delta. This difference may be explained by higher proportions of ethnic minorities in the Central Highlands, as well as higher child mortality and lower levels of education for women.

Country	Indicator Definition	Source	Table
Cambodia	The number of children that a women would have in her lifetime if she followed a given set of age-specific fertility rates (1998)	Population Census 1998	РорМар
Lao PDR	The average number of children a woman would bear if age-specific fertility rates remained unchanged during her lifetime (2000)	Health Survey 2000	
Thailand	Mean number of children ever born per ever-married woman 15-49 years old (2000)	Population Census 2000	Key Ind.
Viet Nam	Total fertility rate (1999)	Viet Nam Population Strategy	Table 1.1

#### Malaria cases per 1,000 people per year



#### Malaria cases per 1,000 people per year

Malaria is endemic in many parts of the LMB, and government programmes throughout the region are targeting the distribution of mosquito nets and other preventive measures. The high incidence, however, reflects the difficulties many people still encounter in protecting themselves. It also reflects the lack of adequate health services to treat the disease.

Malaria is most common in rural areas where mosquito habitats are found. There is a strong correlation between the prevalence of malaria and poverty, as poorer people are less able to prevent the spread of the disease or to seek cures.

The disease has significant impacts on socio-economic development, as it can quickly develop to the stage of an epidemic within a given area and do great damage to economic productivity and social well-being.

In remote areas of the Mekong Delta and the Central Highlands, as well as the northern regions of Cambodia and Lao PDR, up to 5 percent of the population contracts malaria each year. Incidences are considerably higher in many provinces of Lao PDR where above 10 percent of the population is infected with malaria. Again, this is more common in the remote upland areas of the country, where it is difficult to reach people with prevention or treatment services.

On the Korat Plateau and in the North Region of Thailand, the incidence of malaria is much lower. This is due mostly to more effective health services.

Country	Indicator Definition	Source	Table
Cambodia	Probable incidence of malaria per 1,000 people (2000)*	WHO Malaria Report 2000	
Lao PDR	Malaria cases per 1,000 people (1998)	Ministry of Health 1998	
Thailand	Malaria cases per 1,000 people (1996)	Ministry of Public Health 1996	
Viet Nam	Malaria cases per 1,000 people (1998)	Viet Nam Human Development Report 2001	Table 8

\* Data ranges for Cambodia are 0-5, 6-10, 11-50, 51-100, 101-200. Provinces in the 0-5 range are included in the 1-5 classification on the map. Some provinces in this range may have rates below 1.

# Viet Nam Lao PDR Thailand Lao PDR Cambodia Thailand Cambodia 5 Viet Nam Percent Ν 0.1 0.3 1.9 2.8 100 200 Kilometres 0 No Data

# Estimated Prevalence of HIV (proportion of the 15-49 year old population)

# Map 38: HIV/AIDS

#### Estimated Prevalence of HIV (proportion of the 15-49 year old population)

The presence of HIV/AIDS has been documented in the LMB since the early 1990s, and constitutes a major public health issue in the countries of the region. HIV prevalence measures the proportion of the population in the 15-49 age group that is HIV-positive. Statistically reliable prevalence rates are not currently available at province level.

HIV prevalence varies significantly across the region. Cambodia has had the highest prevalence rate in the LMB and in the Asia Pacific region as a whole. The rates are highest among the populations of Phnom Penh, the Plains Region and provinces close to Thailand. Recent data suggest, however, that the situation may be stabilising. The incidence of HIV/AIDS has declined from 4 percent in 1997 to 2.8 percent in 2000, with continuing declines since then (MOP-Cambodia 2001).

Government initiatives in Thailand to promote preventive measures have been successful, with a significant decline in the incidence of HIV/AIDS. On the other hand, the situation is different in Viet Nam where the incidence of HIV/AIDS has grown in recent years at an annual rate of 7 percent (World Bank 2002c).

Major factors in the transmission of the HIV virus in the LMB are heterosexual contact and high levels of population mobility. In Viet Nam, injecting drug use is also becoming an increasingly important means of transmission (UNDP-Viet Nam 2001).

Women in the LMB are particularly vulnerable to the growing presence of HIV/AIDS. Trafficking in women and young girls for sexual purposes increases their exposure to HIV. Women in the general population and their unborn children are also at risk due to the high degree of mobility among men within the region.

Country	Indicator Definition	Source	Table
Cambodia	Estimated prevalence of HIV among 15-49 year old population (2000)	WHO HIV/AIDS Report 2001	Table 1
Lao PDR	Estimated prevalence of HIV among 15-49 year old population (1999)	WHO HIV/AIDS Report 2001	Table 1
Thailand	Estimated prevalence of HIV among 15-49 year old population (2000)	WHO HIV/AIDS Report 2001	Table 1
Viet Nam	Estimated prevalence of HIV among 15-49 year old population (2000)	WHO HIV/AIDS Report 2001	Table 1