



Mekong River Commission

Social Atlas of the Lower Mekong Basin

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Foreword

It is my pleasure to present the first edition of the Social Atlas of the Lower Mekong Basin. The Atlas represents fruitful cooperation between the Mekong River Commission, the National Mekong Committees of Cambodia, Lao PDR, Thailand and Viet Nam, and government agencies in the four member countries. The product of this collaboration is a document that will prove useful to planners, policy makers and researchers within the Lower Mekong Basin (LMB) and beyond.

The impetus for producing the Atlas comes from the MRC's ongoing mission to ensure the sustainable management of the water and related resources of the LMB. An important component of this mission is increasing the breadth and depth of the existing body of knowledge about the river, its resources and its people. Only by properly understanding these key aspects of the LMB can we hope to make responsible decisions about the future use of its resources. The MRC has already made substantial contributions to the development of an understanding of the hydrology, geography, and other physical conditions of the basin through its technical databases. Increasingly, however, the Commission has recognised the demand for information on socio-economic aspects of development in the region. Improving the livelihoods of the people is one of the end goals of sustainable resource management, and there is therefore a critical need for authoritative information that addresses the social dimensions of river basin planning.

While there are many sources of data detailing social conditions in the four countries, it is rare that they are brought together to give a whole-of-basin perspective. The basin-wide perspective we present in this social atlas allows planners, policy makers and researchers to focus on cross-cutting issues that transcend national boundaries. The Social Atlas of the Lower Mekong Basin was conceived to map a variety of important social indicators at province level across the LMB to be of greater value in the analysis of geographic variations across countries.

The main users of the Atlas will be the National Mekong Committees and line agencies dealing with the many aspects of river basin management and social development in the four countries. It is also hoped that the Atlas will prove to be a useful resource for the wider community of government policy-makers, civil society organisations, and international agencies working in the LMB region.

This publication is to be accompanied by an interactive electronic version allowing users to access a greater range of information with more flexibility. Periodic updates to both the print and electronic versions of this atlas will be made as new data become available. The MRC views this Social Atlas as an invaluable reference document for all agencies involved in development in the Lower Mekong Basin. We look forward to the production of future editions and continued dialogue with all readers about ongoing improvements that can be made.

I hope you find this Social Atlas of the Lower Mekong Basin to be the valuable resource that it was planned to be.



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The production of this Atlas involved gathering data from many varied sources. The document could never have become a reality without the kind and diligent cooperation of many organisations and individuals. First we would like to thank the National Mekong Committees of Cambodia, Lao PDR, Thailand, and Viet Nam for providing advice and guidance, as well as data from numerous government sources within their countries. We are also indebted to numerous other organisations that provided assistance in finding the data required for this Atlas. These include: the Ministry of Education of Cambodia; the National Institute of Statistics of Cambodia; the National Statistical Centre of Lao PDR; the Ministry of Labour and Social Welfare of Lao PDR; the National Economic and Social Development Board of Thailand; the National Statistical Office of Thailand; the Asian Development Bank; the United Nations Development Programme; the United Nations Environment Programme; and the United Nations World Food Programme. Special thanks are also due to the World Wide Fund for Nature's advice on the supplementary environmental maps of this Atlas.

The Social Atlas draws on data published by many other organisations. These sources are specified where appropriate in the body of the Atlas, as well as in the Reference List and Data Sources List in the Appendices.

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Introduction

Purpose of the Atlas

This Atlas has been published to increase understanding of social issues in the Lower Mekong Basin (LMB). The Atlas is a part of the Mekong River Commission's ongoing efforts to bring together and disseminate information and analysis about the environmental, social, and economic condition of the Mekong River Basin, its resources, and its people.



The Lower Mekong Basin is the area drained by the southern portion of the Mekong River and its tributaries. The basin cuts across four countries, including most of Cambodia and Lao PDR, and substantial portions of Thailand and Viet Nam. The territories that comprise the LMB, despite being separated by national boundaries, are linked by the river, its watersheds, and its drainage areas. The Mekong is a shared natural resource of great importance. It is widely agreed that there are important linkages between the use and condition of resources such as rivers, and the socio-economic development of the people who live close to them. In the

case of the Mekong River Basin, social issues such as poverty, education, and economic growth all affect the ways in which people exploit the resources of the river. The conditions of these resources in turn have implications for how successful people are in raising their standard of living and bringing about related social improvements. In a very real sense then, the social conditions of people living within the LMB are bound together by the river they share. Therefore a basin-wide perspective on social issues is useful for gaining a greater understanding of socio-economic development within each country, as well of the pressures upon the natural resources of the river system. A perspective on social issues that encompasses the entire basin is also important for the planning and management of the river and its resources, because social development is often a desired end result of such activities.

There is currently a great deal of data available on socio-economic conditions in the four riparian countries. However, the data come from a variety of sources, and are often widely dispersed, making it difficult to bring them together for purposes of comparison and integrated analysis. Furthermore, such data are often presented aggregated at the national level, and are generally in the form of tables and graphs. As such it can be difficult to highlight spatial themes such as hotspots of socio-economic disadvantage, priority areas for intervention, and relationships between geographic features and social conditions. The Social Atlas of the Lower Mekong Basin was thus conceived to fill an important gap in our understanding of the region by presenting geographically disaggregated maps of major social indicators across the entire LMB. It is the only document of its kind to focus on social indicators at the province level in Cambodia, Lao PDR, Thailand, and Viet Nam.



The Atlas is designed to be a useful resource for policy-makers, development agencies, and researchers. Both in planning for development and in monitoring its impacts, decision-makers need accurate information about the status of populations that could be affected. Data on incomes, infant mortality, life expectancy, literacy, population structure, access to services such as education, transportation, health care and many other issues need to be considered with regard to development. The social maps in this Atlas will increase the usefulness of such data by allowing interested parties to introduce spatial analysis into the planning and prioritising of development activities. In particular, it is hoped that the Atlas will facilitate cross-border planning on a regional scale, especially in the context of the Basin Development Plan currently being developed by the Mekong River Commission.



Content of the Atlas

Following an introductory discussion setting the context of social issues in the LMB and outlining the general socio-economic conditions of each country, the main content of the Atlas consists of six thematic sections. These sections are: population, labour force, living standards, health, education, and finally supplementary and environmental maps. The first five themes, taken together, paint an illuminating picture of the social conditions and general state of well-being of the people of the LMB. The environmental and supplementary maps highlight relationships between social development and the physical conditions of the areas in which people live. These maps are intended to provide a context within which to understand social issues, rather than to present a comprehensive analysis of the state of the environment in the Lower Mekong Basin.

The Atlas contains 45 social maps and 6 supplementary maps. The choice of individual maps included was based on input from stakeholders, but was also driven by the availability of reliable, consistent data at the correct level of aggregation. A number of important and useful indicators have not been included because the data either did not exist in disaggregated form, or was not sufficiently comparable across the countries. However, some indicators were considered so important to the understanding of social issues in the LMB that maps were included even if data for one or more countries was only available at the national level. The use of national-level data for a country is indicated in the maps by showing that country without province labels or boundaries. It is hoped that provincial data for these indicators will be available for future editions of the Atlas.

Appendices to the Atlas contain references cited in the text, the complete datasets used to generate each map, and full descriptions of statistical data sources.

Format of the Atlas

The Atlas follows a standardised format so as to allow for maximum readability and ease of use. A single page is devoted to each indicator, with a colour-coded map and legend showing the value of the indicator in each province. For consistency, standardised colour coding has been adopted, with light greens representing lower values and dark blues representing higher values. The values represented by each colour vary from map to map, with the ranges of values chosen on a case-by-case basis so as to highlight important themes and differences for each indicator. Because the value ranges vary, the user is urged to check the values carefully when making comparisons between maps. To capture continuous data, the map legends employ overlapping data classes, for example “0-20”, “20-40”, and so on. In such a case, a value of “20” would fall into the first class while a value of 20.01 would fall into the second class. Each map is also accompanied by a concise commentary highlighting key features. A definitive analysis of the maps cannot be given in the space available, so the text aims to act as a guide and starting point for the reader's analysis. A table at the bottom of each page presents the definition, source document, and reference table of the dataset used for each country. The environmental and other maps in the supplementary section do not take provinces as their primary unit of analysis, and therefore employ different formats depending upon the data being displayed. All maps are presented in Universal Transverse Mercator projection (Zone 48); Datum: Indian 1960; Spheroid: Everest 1830.



Atlas Data

The data employed in the production of the social maps are largely drawn from the reports of official censuses and socio-economic surveys conducted by the four riparian governments. The data for most of the environmental and supplementary maps are based on the Mekong River Commission's collection of geographic datasets. Where necessary, the Atlas also draws upon data from secondary calculated sources (such as for poverty lines) or datasets collated by the United Nations and other agencies. Every effort has been made to use the most reliable data available. However, the reader is reminded that even the highest-quality datasets on social issues in developing countries are sometimes prone to inconsistencies and errors.

Gathering comparable data for socio-economic indicators across four countries with differing social conditions, levels of development, and systems for the gathering and processing of statistics is necessarily a very difficult task. Given that data has been collected in Cambodia, Lao PDR, Thailand, and Viet Nam at different times using differing definitions and methodologies, it is often impossible to generate a dataset for an indicator that is perfectly comparable across the four countries. One major problem comes from having to compare data values that come from different years. Indicators based on census data, for example, present the situation in each country as it was during the census year, which was 1998 for Cambodia, 1995 for Lao PDR, 2000 for Thailand, and 1999 for Viet Nam. This means that a map presenting, say, the proportion of the population aged less than 15 years will be comparing 1995 values for Lao PDR with 2000 values for Thailand. Any change that has taken place within the two countries during this five-year period that could make differences between them smaller or larger will not be reflected in the map.



There are also important differences in the definitions of indicators. For example, the official age at which a person is considered a member of the labour force varies between the countries. This means that direct comparisons between the proportions of working-age people unemployed or economically inactive will be misleading. Such differences in definition have been minimised or eliminated by normalisation of data where possible. Where this has not been possible, maps have only been included where the differences in definition are small enough to ensure that cross-border comparisons are still meaningful. Furthermore, the Atlas has been formatted so as to make the definitions upon which the maps are based as obvious as possible. The reader is advised to bear these definitions in mind when analysing the maps and to exercise caution in making comparisons across countries when the data definitions are not identical.

Related and Future Publications

This Atlas is also available in CD-ROM format. The CD contains the Atlas maps and text, as well as an interactive application that allows users to generate maps for each indicator and for percentage and ratio based comparisons of multiple indicators. The Atlas is intended to be a recurrent publication, with future editions to be produced as new data becomes available. The MRC welcomes suggestions and feedback for improving future versions of the Atlas. Finally, readers interested in the latest data and analysis on the state of the Mekong River basin and its resources are referred to The State of the Basin Report, to be published by the MRC in 2003.

Social Issues in the Lower Mekong Basin

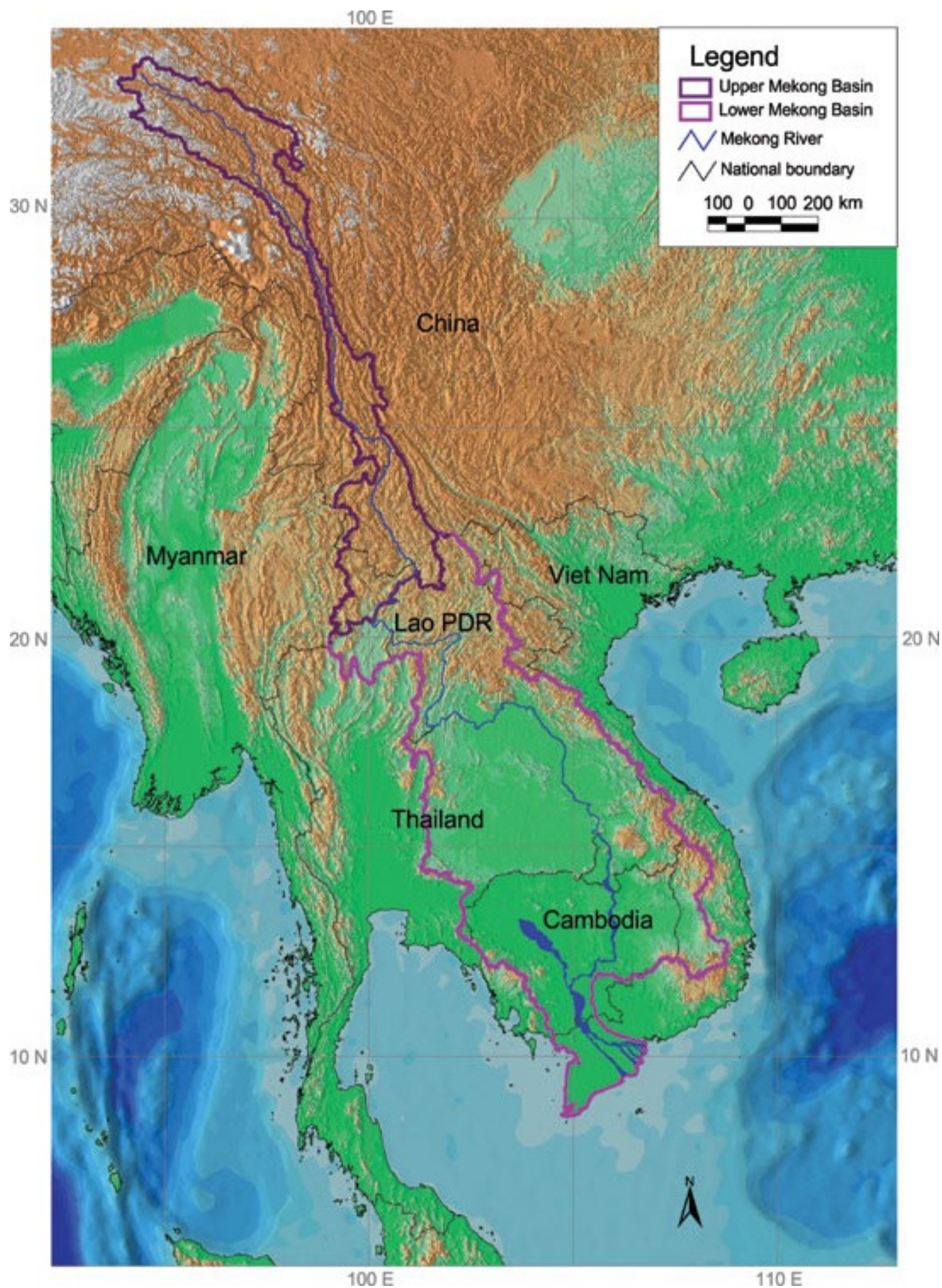
Geographic Overview

The geography of the Lower Mekong Basin encompasses a wide range of landforms and physical features that have important implications for the social conditions of the people who live within the region. A brief sketch of the geographic profile of the region thus provides a useful context within which to understand social issues. The Mekong River rises in Qing Hai province in western China. The river then flows east and south through the provinces of Tibet and Yunnan. In southern Yunnan, it leaves China to form the border of Myanmar and Lao PDR. This point defines the division between the Upper Mekong Basin, the parts of China and Myanmar drained by the river, and the Lower Mekong Basin. The Lower Mekong Basin can be viewed as five separate geographic components:

- Starting upriver, the first component is the mountainous region consisting of the northern Lao PDR and a small part of Thailand's North region. Here, remote and scattered settlements are found on the slopes and in the valleys of mountain ranges that stretch north into China's Yunnan Province.
- Moving southward, the terrain flattens out at the Mekong Corridor, a narrow strip of land between the mountains of northern Lao PDR and the Mekong River, which forms the border with Thailand. The flat land continues over the river into Northeast Thailand in a region known as Isan, or the Korat Plateau. This roughly rectangular region is bordered by mountain ranges to the west and south and the Mekong to the northeast and contains approximately 40 percent of the population of the LMB.
- The third geographic region consists of the Annam-Cordillera mountain range running through central and southern Lao PDR and bordering Viet Nam. Altitude gradually decreases as the range runs southwest and terminates in the Central Highlands of Viet Nam and the eastern uplands of Cambodia.
- To the south of the Korat Plateau is another major expanse of flat land, comprised of the Mekong lowlands and Tonle Sap Plain area of Cambodia. Between 10 and 20 percent of the basin's population live in this fertile rice growing area.
- Finally, the river terminates in the southernmost portion of the basin, the Mekong Delta, which is mostly within Viet Nam. Here rich soils and abundant water support intensive agriculture and a dense population base which comprises approximately 25 percent of the people of the LMB.

An overview of the geographic profile of the entire Mekong Basin is presented in the topographical map on the following page. For more details, please refer to Maps 49 and 50 in the Additional Maps section of this Atlas, which present elevation and land cover, respectively.

Topographical Map of the Mekong Basin (Upper and Lower)



Source: USGS Global GIS Database: Digital Atlas of South Asia

Social Differences and Similarities

The picture of social conditions in the LMB is marked both by great differences in people's levels of achievement in various indicators of social well-being and by important commonalities that give the region coherence as a unit of social analysis and ensure that its people are faced with shared challenges. As such, it is useful to explore the driving factors behind these commonalities and differences.

The varied geographies of the region provide a useful starting point for analysing the drivers of social difference. Whether communities live in remote mountainous regions or flat and lush lowlands, whether soils are fertile or arid, whether forest resources are abundant or scarce, all have impacts on people's abilities to grow food and generate income. In combination with national investments in infrastructure, geography also determines the remoteness or accessibility of communities and hence their access to markets, hospitals, schools and other social goods. Analysis of the maps in this Atlas shows broad correlations between geographical conditions, such as steep mountains that impose remoteness, and poor social outcomes, particularly in terms of health and education.

Mirroring the great differences in terrain and topography, the peoples of the LMB are also extremely diverse. They comprise over 70 distinct ethnic groups, speak many languages and dialects, and have a rich variety of histories, cultures and customs. A majority ethnic group dominates each country, but numerous minority groups also live within and across country borders. Minority groups tend to live in remote and marginal areas and are often less able to access health and education services than the national majorities.

Another important source of divergence in social outcomes is the differing political and economic systems within each state. Each of the four economies is at a different level of development, and there are large variations in wealth, productivity, and market efficiency. Thailand, for example, is firmly in the



ranks of middle-income economies, while Cambodia and Lao PDR are classified by the UN as Least Developed Countries. The riparian governments also pursue different development policies and objectives. Emphasis on economic sectors prioritised for development varies, with Thailand and Viet Nam increasingly becoming industrialized economies, while Cambodia and Lao PDR focus more on intensification of agricultural production. It is likely that such economic divergence between the four riparian countries will increase in the future.

However, the people of the LMB also share much in common and broad generalizations can be made. Most of

the basin's population live in rural areas. They are subsistence farmers, supplementing what they grow with the fish they catch and the food and other materials they gather from forests and wetlands. Livelihood systems are dictated by climate and available natural resources. While numerous forms of agriculture are employed, the most common is rice production fed by the floods and monsoon rains of the wet season. A general shared dependence on the seasonality of the Mekong River's highs and lows is also important because it creates a common vulnerability to flooding and drought. Because of shared traditions and a general lack of wealth available for investment in modern technology, agricultural techniques are similar also, generally involving the same low-value inputs and outputs. As a result, millions of people are producing a similar range of crops with similar levels of efficiency, leading to similar low levels of income. Therefore, unfortunately, poverty is something many share as well. As a result, levels of health, education, and other indicators of social well-being also tend to be low.

Another common factor contributing to continuing poverty and related social problems is the history of colonialism, war, and civil strife that the region shares, with the exception of Thailand. As a result of this tumultuous recent history, some parts of the LMB have suffered damage to their physical infrastructure and human resources that continues to impose constraints on social development.

The Social Indicators

The five broad categories of social indicators included in this Atlas (Population, Labour Force, Living Standards, Health, and Education) each cover an important aspect of the social condition of people in the LMB. Taken together, people's work, income, health, and educational status as well as their access to facilities such as safe water, sanitation and electricity define their personal resources and capacities to live full and productive lives. The make-up of the population as a whole, in terms of such factors as age, sex, and human resources, determines the social needs of the community as well as its ability to provide for these needs. The discussion below highlights the importance of the indicators chosen and broadly characterises the social conditions detailed in the maps in this Atlas.

Population Indicators: Demographic factors are important to social analysis because wealth and other social goods are generated by and shared among diverse groups in the population. Thus the size and rate of growth of the population, as well as balances between genders, age groups, ethnic groups, and urban and rural residents are all important. The population of the LMB, as with many developing countries and regions, is predominantly rural and young. This is due primarily to high fertility rates (the average number of children a woman bears), although these have decreased dramatically in Thailand and to a lesser extent in Viet Nam. The proportion of the population under 15 years old is high, especially in Cambodia and Lao PDR. This burgeoning young population is currently placing great demands on youth-oriented social services, such as education, and will probably continue to do so for the next 15 to 25 years. After that, with lower birth rates, youth will start to comprise a smaller proportion of the population. Across the basin, gender balances are uneven, with more males than females at younger ages, and greater numbers of females in the adult and elderly population. For other population indicators, it is harder to make generalizations. Provincial population densities vary greatly, from lows of less than 10 persons per km² to a high of almost 3,500 persons per km². Population growth rates are similarly variable, ranging from less than one percent to more than five percent per annum.

Labour Indicators: Indicators of labour force composition show how people make their livelihoods, what proportion of the labour force finds it necessary or desirable to work, and how many job seekers are unable to find work. These indicators have implications for income, poverty, and vulnerability to economic shocks.

In the LMB, most adults and many young people are economically active. Economic activity rates are lower for women than men, but the official data mask significant levels of participation in informal economic activity. In most provinces in the region more than 70 percent of the labour force is employed in the agriculture sector. Employment in the industry and service sectors is growing in importance, especially in the urban areas. Generally, females are more likely to work in services, and males are more likely to work in industry. Very few people in rural areas are unemployed, but in

urban areas, unemployment is much higher, and unemployment rates are often significantly higher for females than for males. Underemployment is also a major problem, but data on the issue are scarce. Problems related to unemployment and underemployment will intensify in the near future as large numbers of young people reach working age.



Living Standards Indicators: Measures of living standards such as income and poverty are very important indicators of people's abilities to sustain themselves and lead full and productive lives. Incomes are highest in Thailand, substantially lower in Viet Nam, and lower still in Cambodia and Lao PDR. Key standard-of-living indicators (access to safe water, sanitation, and electricity) reflect these relative differences in income. Access to improved sources of water and adequate sanitation enhances the living conditions of people, particularly their health. Electricity also contributes to improved living conditions, as well as to opportunities for income-generation activities. Access to these services varies widely across the LMB - from very low in parts of Cambodia and Lao PDR to 90-100 percent of the population in Thailand. Patterns in the geographic distribution of poverty are less clear than for income or standard-of-living indicators, with each country having provinces with high and low rates of poverty. It is also difficult to compare poverty across the countries because different methods for calculating poverty lines are used in each. However, it is apparent that the poor make up a considerable proportion of the population in each of the four countries.



Health Indicators: Life expectancy, and the health of children, are important measures of quality of life and have significant impacts on economic productivity and output. Progress in improving such health conditions is a good indication that the benefits of economic development are reaching more than just the affluent. Fertility rates are also very important in the context of social development as they partially determine the rate of population growth, and are themselves correlated with levels of education and economic opportunities for women. Indeed, there is a marked difference between Thailand and Viet Nam, where fertility rates have dropped to near or below replacement levels (2.1 children per woman), and Cambodia and Lao PDR, where they remain very high. The same discrepancy can be witnessed in the measures of life expectancy, infant mortality, and malnutrition. All of these public health indicators are worse in Cambodia and Lao PDR than in their two larger neighbours. The situation is worse still in the remoter parts of these two countries, and also tends to be bad in the Central Highlands of Viet Nam. These areas also tend to suffer from malaria to a much greater extent than other parts of the basin. Malaria is very rare in the urban centres and the whole of Northeast Thailand. The HIV/AIDS epidemic, however, follows a different pattern, with the largest number of sufferers in urban Cambodia and Thailand. While HIV prevalence rates in these two countries have declined in recent years, the disease continues to be a major social problem.

Education Indicators: Monitoring and improving levels of literacy and educational achievement is essential for economic and social development in the LMB. Economic growth and development require a skilled work force, including both men and women. Higher literacy and education levels among women are closely associated with lower fertility rates, as well as improvements to their own health and the health of their children. While gender gaps in access to basic education have almost been eliminated in Viet Nam, and are very small in Thailand, they remain substantial in Cambodia and Lao PDR, especially in areas predominantly inhabited by ethnic minorities. In general, enrolment rates and educational attainment rates are much lower in the two smaller countries than in Thailand or Viet Nam. This difference is particularly marked above the primary level, with Cambodia and Lao PDR having secondary school enrolment ratios that are among the lowest in Asia.

Country Overview: Cambodia



Cambodia is working to overcome a legacy of war and civil strife. The country is now at peace and is enjoying much greater political stability than in the past. Yet there are lingering effects from the decimation of the country's human and physical resources before, during, and after the rule of the Khmer Rouge between 1975 and 1979. By the time peace was restored in the early 1990s, much of the nation's economic infrastructure was in ruins. A decade of reconstruction and rehabilitation followed, during which Cambodia made impressive strides along the path to development. Economic growth during the period was strong, within the range of 4 to 7 percent since the early 1990s, aside from the

financial crisis years of 1997 and 1998. However, growth began from a very small base. The public sector remains poorly resourced, and has particular difficulties providing adequate health and education services. The education system was almost completely dismantled under the Khmer Rouge. While extensive efforts have since been made to rectify the situation, the stock of school facilities and teachers falls far short of the needs of the population. As a result, enrolment rates for secondary school, for instance, are the lowest in all of Asia (MOP-Cambodia 1999). There is also an entire generation who missed out on basic education during the 1970s. Likewise, many health facilities were destroyed, and the medical profession was greatly weakened. The impact of this damage to the Cambodian health system can be seen in poor outcomes for many of the health indicators mapped in this Atlas.

The legacy of war can also be seen in the composition of the Cambodian population. The end of the Khmer Rouge regime led to a baby boom in the early 1980s. As a result, 43 percent of Cambodia's population was below the age of 15 at the time of the 1998 Census. This large youthful population has implications for levels of demand for social services such as child health and education, and will result in large numbers of new entrants to the labour market seeking jobs in future years. These same young people will also begin starting their own families over the next decade, thus helping maintain population growth rates that are currently running at around 2.5 percent. Furthermore, high numbers of male fatalities during the 1970s and 1980s mean that females greatly outnumber males in the adult population. Females often head households, and members of such households are more likely to live in poverty than male-headed households (MOP-Cambodia 1997). There are also many disabled persons and displaced persons, who experience poverty and other forms of social deprivation to a greater extent than the rest of the population.

The national rate of poverty in Cambodia for 1997 was 36 percent, which means that approximately one out of every three Cambodians was living in poverty. Poverty has critical links to nearly all other measures of social well-being. In Cambodia, data show that the poorest people have the worst outcomes for a wide range of social indicators including gender equality, literacy, educational attainment, life expectancy, malnutrition, and disease. Rates of poverty vary widely across the country, from a low of 12 percent in Phnom Penh to a high of over 50 percent in Siem Reap Province. These variations reflect a high level of income inequality in general, but also important differences between rural and urban areas, and between the various regions of the country.

The majority of Cambodia's population lives in rural areas, and faces greater burdens of poverty and social disadvantage than urban dwellers. People in rural areas are heavily dependent upon agriculture, often conducted on a subsistence basis. They are very vulnerable to the floods and droughts that frequently plague the country. Landlessness, resulting partly from mass displacement during the period of civil strife, is also a major contributor to poverty and other social problems in rural areas.

In terms of regional differences, Phnom Penh and the rice growing provinces surrounding it on the Mekong-Bassac floodplain are the wealthiest areas, and in many cases enjoy the best social conditions. In contrast, the remote northeastern provinces of Ratanakiri and Mondulakiri often exhibit higher levels of social disadvantage, illiteracy, disease and early death than other parts of the country. The provinces around the Tonle Sap Lake are also relatively deprived, and have high levels of poverty and other poor social conditions.



Country Overview: Lao PDR

Much of the social and economic character of Lao PDR stems from its topography. The country is extremely mountainous. Arable land is in short supply, and many farmers must make do on marginal terrain. This has kept national agricultural productivity low and prevented agricultural surpluses from becoming a driver of development as they have in other parts of the basin. The steep mountains and deep valleys also make transportation within the country very difficult. As a result, many communities are extremely remote.



An estimated 30 percent of villages are not accessible during the wet season, and only 20 percent can be reached by truck at any time of the year (NSC-Lao PDR 1999). Historically, this remoteness has contributed to the development of a country comprised of a very large number of diverse ethnic groups. In 1995, the national census distinguished 47 main ethnic groups and a total of 149 sub-groups (Chazée 1999). The dominant ethnic group is ethnic Lao, who make up just over 50 percent of the national population. Other groups, referred to as ethnic minorities, comprise 40 to 60 percent the population in many southern and central provinces, and around 85 percent in the north (RTI 2001). Minority groups generally live in the more remote upland areas, and are more likely to suffer from poverty and related problems than ethnic Lao. While ethnic Lao dominate the national population, they make up only 7 percent of the poor (UNDP-Lao PDR 2001).

The country consists of three regions, North, Central, and South. There are important social differences between the regions. The Central region is the most prosperous area, containing the capital Vientiane as well as the surrounding Vientiane Plain. The Mekong Corridor, a strip of flat and fertile land between the river and the foothills of the mountains, also runs through this region. Ethnic Lao predominate in this region, as in other lowland areas. Proximity to Thailand has increased economic prosperity through trade and investment, and many people in this part of the country can speak some Thai. A series of market-oriented economic reforms beginning in 1986 have had more success in increasing growth in the Central region than in the North or the South. The people of this region have been better able to take advantage of new economic opportunities than those elsewhere because of their greater proximity to markets and transport infrastructure. As a result, the Central region contains a smaller proportion of people living below the poverty line than the rest of the country. Health and education indicators also tend to be highest in the Central region.

The provinces of the North region are almost entirely mountainous and are dominated by ethnic minorities. The southern provinces are also comparatively rugged and remote and are less populous than the rest of the country, constituting only 20 percent of the national population. However, the southern portion of the Mekong Corridor forms a strip of productive arable land down the length of this region, contributing to regional incomes that are higher than in the North. Often the northern provinces come out the worst for poverty and related indicators, although there are also scattered southern and central provinces that tend to fare poorly.

Despite these regional generalisations, there is, in much of the country, a discernible gradient of disadvantage running from west to east. In general, social problems are much more pronounced in the remote and mountainous eastern districts than in the comparatively flat and affluent western districts along the Mekong Corridor. Unfortunately, these differences cannot be seen on the province-level maps in this Atlas. Many provinces in Lao PDR run right across the width of the country and provincial averages thus mask the differences between the western and eastern districts. This means that there are comparatively poor and remote districts to the east of the Central region, and comparatively prosperous and accessible districts at the western extent of the southern provinces.

In line with the general remoteness of most communities and very low overall population densities, the population of Lao PDR live predominantly in rural areas. More so than any other country of the basin, the majority of the national population depend upon traditional agricultural systems for their livelihoods. Shifting cultivation, whereby upland communities farm marginal lands until their productivity is exhausted and then move on to clear and plant new areas, is common. This form of agriculture can be particularly damaging to the environment and makes it very difficult for people to pull themselves out of poverty or subsistence lifestyles. Whether rural Lao are engaged in shifting cultivation or sedentary agriculture, they tend to share a lack of access to basic health and education services, as well as clean water, sanitation and electricity. In contrast, residents of Vientiane Municipality, as well as other urban centres, can access such services more easily. As a result, Vientiane stands out from most of the rest of Lao PDR in the achievement of positive social indicators. When assessing the maps in this Atlas, it is important to remember that the administrative unit called Vientiane Municipality (not to be confused with Vientiane Province) is only 63 percent comprised of urban residents. This means that almost 40 percent of the population are rural people, and the values for many indicators would be higher if the data covered city dwellers only.

Disparities in social outcomes between men and women are also a distinctive feature of the social situation in Lao PDR. This is the case particularly in terms of education-related and economic indicators. As with other social problems in the country, these discrepancies are larger in remote rural areas and among minority groups. Despite improvements in the 1990s, levels of literacy for adult women are still



significantly lower than for men. In many ethnic minority groups, female literacy rates are often well below half those for males (RTI 2001). Net primary enrolment rates are much lower for girls than boys, and young girls generally attend primary school for only 2 to 3 years. Parents are reluctant to send their daughters to school because of the important roles girls play in the domestic and economic activities of the household. Families also prefer to educate sons for cultural reasons and because it is considered safer to send sons to schools which are often some distance from villages.

Low levels of education and economic opportunity for women, along with high levels of infant and child

mortality, contribute to a very high national fertility rate of 4.9 births per woman, with provincial rates as high as 7.3. As a result, population growth rates are high, and there are disproportionately large numbers of young people. Low life expectancies - the result of poor health conditions - ensure that few people survive past the age of 60, further skewing the distribution of the population towards the young. As in Cambodia, this large population of young people puts great strains on limited national health and education resources.

Country Overview: Thailand

Thailand has experienced dramatic economic change over the last half century, moving rapidly from being a poor agrarian nation in the 1960s to a middle-income industrialized economy in the 1990s. GDP increased an average of 7.6 percent per year between 1977 and 1996, with most of the growth coming from a rapidly-expanding manufacturing sector fuelled by foreign investment and supportive government policy (UNDP-Thailand 1999). Along with economic expansion, Thailand has also experienced far-reaching social change. The country has become more urbanized, with many people moving to the cities to take newly-created jobs in the industrial and service sectors. Incomes have increased, and the poverty rate dropped from 33 percent in 1988 to 11 percent in 1996 (UNDP-Thailand 1999). As a result, health, education, and other aspects of social well-being have all improved greatly. In the health sector, child, infant, and maternal mortality rates have all halved over the 1990s and life expectancy has increased by 10 years since 1970 (UNDP-Thailand 1999). The prevalence of malaria and other tropical diseases has been drastically reduced. Increasing investment in education resulted in a national primary net enrolment rate of about 98 percent in 1996, up from around 70 percent in 1970 (UNDP-Thailand 1999). The traditional gap between the educational attainments of men and women has been nearly eliminated, with literacy and primary school enrolment rates for women now almost as high as for men.

The explanation for improvements in individual incomes and access to social services lies only partly in economic growth and expanding government revenues. The other side of the story is a dramatic decrease in the total fertility rate, which has slowed down the population growth rate. The fertility rate has plummeted from around 5 children per woman in the early 1970s to 1.98 in the late 1990s, mostly as a result of increasing levels of education and economic opportunity for women (UNDP-Thailand 1999). A slower growing population means that each person can enjoy a greater slice of the expanding economic pie than would otherwise be possible.





These impressive improvements to the social conditions of the Thai people were interrupted in 1997 when the Asian financial crisis rocked the country. As a result of the crisis incomes dropped, and some of the gains in living standards were eroded. Economic growth dropped to negative rates and the national poverty rate increased from 11 percent to 16 percent (ADB 2002). The Thai economy has since recovered from the crisis and annual GDP growth rates have returned to around 4 percent, but the momentum of social change is slower now than in the 1990s.

The rapid social and economic developments discussed above have not been evenly distributed across the country. The Northeast region, which comprises most of Thailand's share of the LMB, has remained the poorest part of the country. Also known as Isan, the Northeast consists largely of the Korat Plateau, a flat and dry region running from mountain ranges in the west and the south, to the Mekong River. The area suffers from poor soils and a lack of rainfall, constraining agricultural productivity. Markets are poorly developed, and traditional, low-efficiency agriculture is widely employed. The Northeast, which makes up 35 percent of the national population, contains approximately 62 percent of the country's poor (NESDB

2001). The regional poverty problem was exacerbated during the financial crisis and accompanying economic contraction. Many migrant workers in Bangkok and other cities were laid off and moved back to their home provinces in the Northeast, resulting in greater pressure on the resources of the region.

The situation is somewhat different in the cities of the Northeast. The urban centres have industrialized relatively rapidly and have invested considerable resources in regional development. Therefore the provision of public services such as transport infrastructure, electricity, water supply, education and health, while lagging behind other parts of Thailand, still compares favourably to the rest of the LMB.

Along with the Northeast, a small portion of Thailand's North region also lies within the Mekong Basin. The North Region is very different from Isan. The terrain is much more mountainous, and home to remote communities of ethnic minorities known collectively as hill tribes. Tourism is an important part of the economy, and the provinces of the region are generally richer than those of the Northeast. The region also contains Chiang Mai, Thailand's second-largest city. The city itself lies outside the LMB, although part of Chiang Mai Province extends into the basin.

Country Overview: Viet Nam



Social and economic development in Viet Nam must be seen in the context of the Doi Moi reforms that began in 1986. Doi Moi translates to "renovation" and is a process of economic liberalization that has greatly increased national income and productivity with a resulting increase in living standards across the country. Real GDP doubled during the 1990s, and the proportion of the population living in poverty dropped from just under 60 percent to about 35 percent. Viet Nam has gone from being unable to produce enough food to feed its people to being the world's second-largest exporter of rice. Social conditions have also improved greatly, with near universal primary education achieved for both boys and girls and substantial declines in fertility rates and child, infant and maternal mortality rates.

However, the benefits of these developments have not been spread evenly across the country. Income inequality has increased over the

period, with big differences between the poorest provinces (which are generally located in the north of the country, although several are within the LMB) and the richer provinces around Hanoi and Ho Chi Minh City (UNDP-Viet Nam 2001). Many people in Viet Nam remain poor, particularly those who are members of minority ethnic groups and those who are geographically isolated or on the margins of society. There are particular problems in rural areas, where unemployment and underemployment are often high and large numbers of young people are joining the labour force every year. Development in many rural areas is also constrained by declining agricultural land per capita, a lack of investment and modern agricultural technology, and weak markets and physical infrastructure. Furthermore, in such places many people have only a tenuous grasp on prosperity and could easily be thrown back into poverty by such shocks as natural disasters or economic crises.

The regions of Viet Nam within the LMB (the Mekong Delta and the Central Highlands), while not the most impoverished parts of the country, lag behind national averages for many indicators. Incomes in the Mekong Delta and the Central Highlands are, respectively, 7 and 17 percent below the national average. These two regions differ greatly from each other in their physical, demographic, and economic composition and these differences can be seen in many of the maps in this Atlas. However, one reason why they lag behind other parts of Viet Nam in terms of incomes is that they have industrialised more slowly than the major urban centres of Hanoi and Ho Chi Minh City. In 1995, for example, industrial production comprised 27.6 percent of national GDP, but in the Mekong Delta and the Central Highlands it made up only 14.3 and 11.7 percent respectively (UNDP-Viet Nam 2001).

The Mekong Delta is the rice bowl of Viet Nam. It is one of the most productive and intensively worked agricultural areas in all of Asia. While the Delta constitutes only 12 percent of Viet Nam's land area and 20 percent of its population, it is the source of more than 35 percent of the country's total agricultural output (GSO-Viet Nam 2001). In the Delta, the Mekong splits into nine main distributaries that run through fertile soils, making for very attractive agricultural conditions. These waterways are interlinked by a dense network of dikes and canals, providing the region with excellent infrastructure for waterborne transport. As a result of the Delta's comparative accessibility and its intense productivity, it is also very densely populated. The overcrowding of the region means that its agricultural bounty must be shared between many people. Per capita incomes thus remain comparatively low. Furthermore, several of the provinces of the Delta (specifically Dong Thap, Soc Trang, An Giang, Tra Vinh, and Bac Lieu) that do have relatively high incomes have not managed to translate these economic gains into improvements in social development (UNDP-Viet Nam 2001). While incomes are high and underemployment is low in such provinces, social indicators such as health, education, and access to essential services are lagging. Unskilled workers predominate in the workforce, and they are very vulnerable to market fluctuations and other shocks. One shock that the Delta provinces are particularly vulnerable to is flooding. A major portion of the land area of the Mekong Delta (including the Cambodian part) is inundated at some point during the rainy season every year. Floods destroy crops and take lives, but they are also an integral part of the normal agricultural patterns of the region, restoring soil fertility and feeding irrigation reservoirs that are used to water crops throughout the year.



The Central Highlands are very different from the Mekong Delta. This region is mountainous, has extensive forest cover, and has traditionally been one of the remotest parts of Viet Nam. As in other remote places within the LMB, many ethnic minority groups make their homes in the Central Highlands. Major groups include the Ba-Na, Gie-Tieng, Ra Giai, Xo-Dang and E-De groups. In Kon Tum Province, ethnic minorities account for over 50 percent of the population. As in Lao PDR, many of these groups practice shifting cultivation. Productivity is low and many people live on a subsistence basis. This situation is beginning to change as the government encourages the immigration of lowlanders to exploit the potential of expanding cash-crop industries such as coffee and sugar cane. The population of the region is thus a mix of new immigrants, who tend to be young and male and employed in low-skill occupations, and the resident minority groups. The Central Highland provinces generally fare worse than those in the Mekong Delta for most social indicators. Health indicators such as infant mortality and child malnutrition are particularly bad for this region

because of a lack of medical facilities and practitioners in the remote rural communities. Education rates and gender parity in accessing education are also lower than in the Delta. However, social conditions still tend to be better than in most parts of Cambodia and Lao PDR.



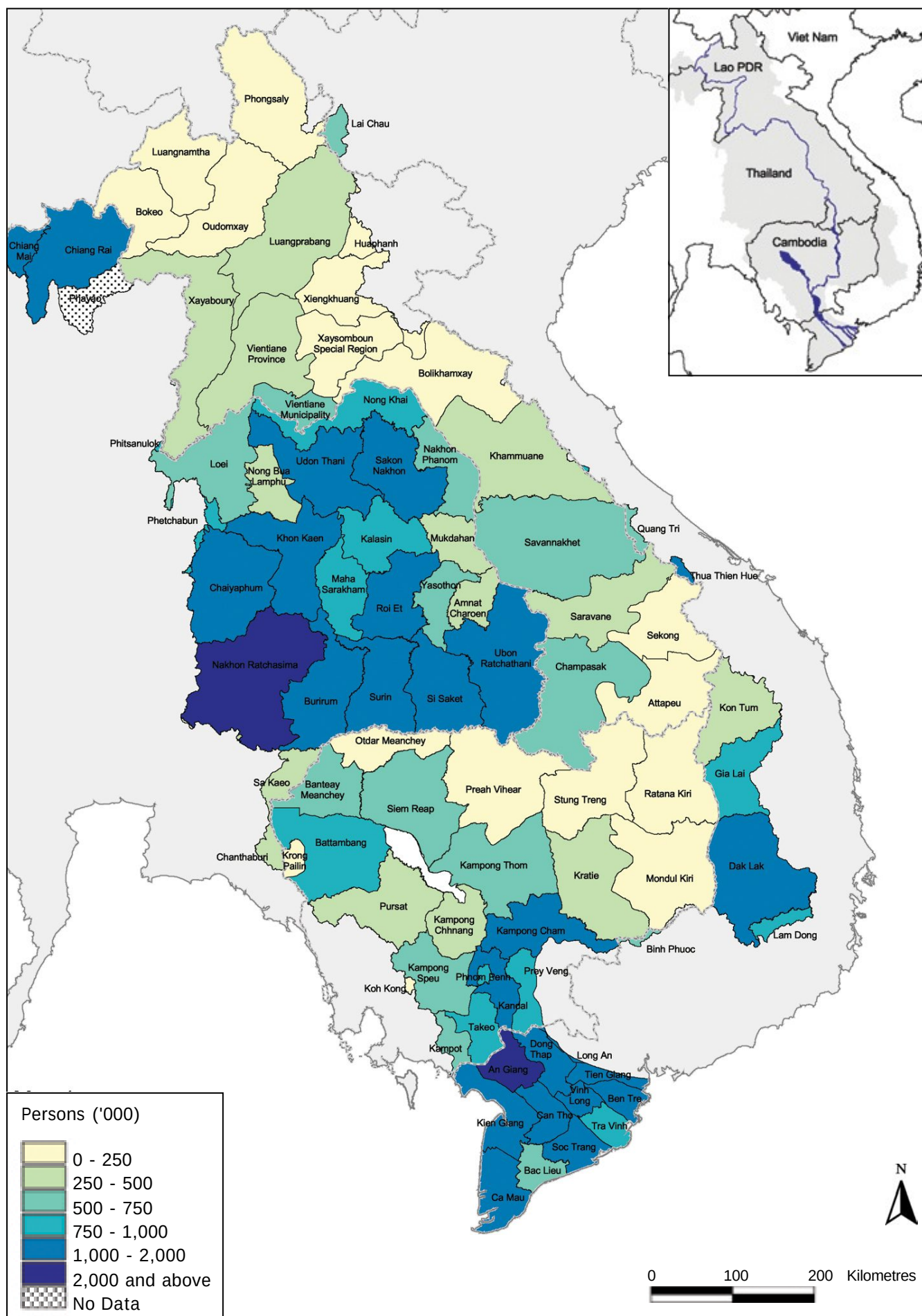
Population

Population Maps

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Map 1: Population

Provincial population



Map 1: Population

Provincial population

This map shows the distribution of people across the LMB. Approximately 53 million people lived in the LMB areas of the four riparian countries when the most recent national censuses were conducted.

Cambodia makes up approximately 18 percent of the total population of the basin, and 84 percent of its national population lives in the basin. Most of the country's people live in the rich rice-growing areas along the Mekong and within easy distance of the capital, Phnom Penh.

Almost all (93 percent) of the people of Lao PDR live within the Mekong Basin. However, the country is sparsely populated and contributes only about 8 percent of the basin's total population. The Central region, including the capital Vientiane, is the most populous, followed by the North and then the South.

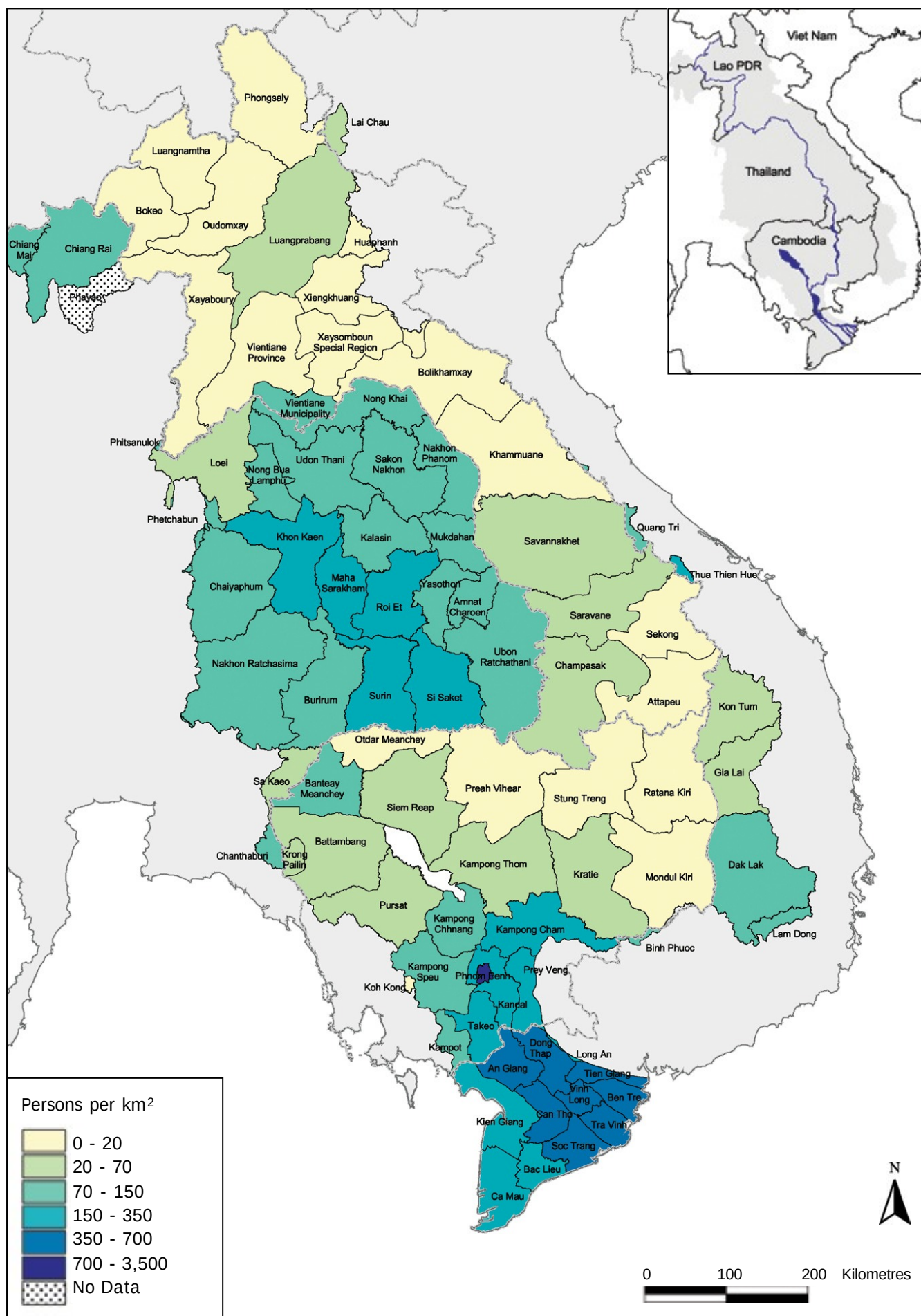
Thailand's Northeast is the most populous region of the country; together with the parts of the North region in the LMB, it is home to 37 percent of the Thai population. In total, Thailand represents 42 percent of the basin-wide population.

The Mekong Delta region in Viet Nam is one of the two main population centres of the country. The other is the Red River Delta, around Hanoi in the North. The Central Highlands is also becoming an increasingly important population centre because of government-sponsored migration policies. Around 20 percent of Viet Nam's population lives in the Mekong Delta and the Central Highlands, making up 31 percent of the LMB population.

Country	Indicator Definition	Source	Table
Cambodia	Provincial population (1998)	Population Census 1998	PopMap
Lao PDR	Provincial population (1995)	Population Census 1995	Table 1B
Thailand	Provincial population (2000)	Population Census 2000	Key Ind.
Viet Nam	Provincial population (1999)	Population Census 1999	Table 1.5

Map 2: Population Density

Number of persons per square kilometre



Map 2: Population Density

Number of persons per square kilometre

Population density varies widely across the LMB. The range extends from 2 persons per km² in Mondul Kiri in the eastern Cambodian uplands to almost 3,500 persons per km² in Phnom Penh. Thailand and Viet Nam are the more populous countries, with generally higher population densities.

The lowest densities occur in the upland regions of Lao PDR and the heavily forested northern and eastern provinces of Cambodia. The relation of topography to population density is clear in Lao PDR. In the low-lying districts of the Mekong Corridor, where urban centres are frequently located, density is significantly higher than in the remote mountainous districts to the east.

Population densities are comparatively low in the Tonle Sap region and the northern part of the Central Highlands. However, government sponsored in-migration policies have bolstered population growth in the Central Highlands in recent years.

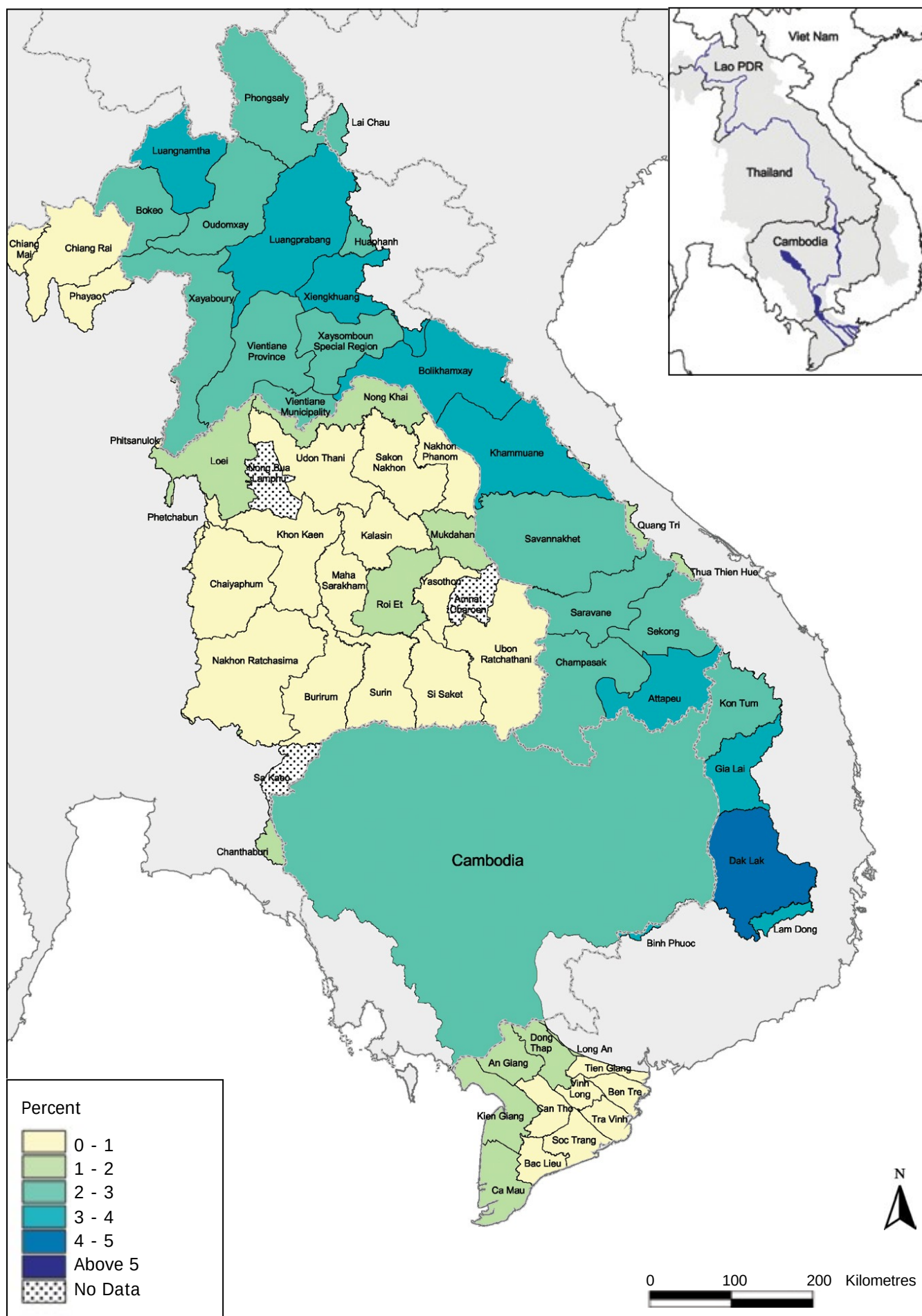
On the Korat Plateau of Thailand, flat terrain served by an extensive transport infrastructure has led to moderately high population densities (75-175 persons/km²). Densities are similar in the southern plains around the Mekong and Bassac rivers in Cambodia.

The northern and central provinces of the Mekong Delta in Viet Nam are the most densely settled (350-650 persons/km²), due in part to good accessibility by road and inland waterways, and proximity to Ho Chi Minh City. Here the distributaries of the Mekong also run through fertile soils, making for attractive agricultural conditions that support large numbers of people.

Country	Indicator Definition	Source	Table
Cambodia	Number of persons per square kilometre (1998)	Population Census 1998	PopMap
Lao PDR	Number of persons per square kilometre (1995)	Population Census 1995	Table 1B
Thailand	Number of persons per square kilometre (2000)	Population Census 2000	Key Ind.
Viet Nam	Number of persons per square kilometre (1999)	Population Census 1999	Table 1.5

Map 3: Population Growth

Annual population increase



Note: Province names and boundaries are not shown where national or regional data are used

Map 3: Population Growth

Annual population increase

Population growth rates in most of Thailand and parts of the Mekong Delta are very low because of declining fertility rates (see Map 36). These regions of the LMB are growing at less than two percent per year, with growth rates of less than one percent in many provinces.

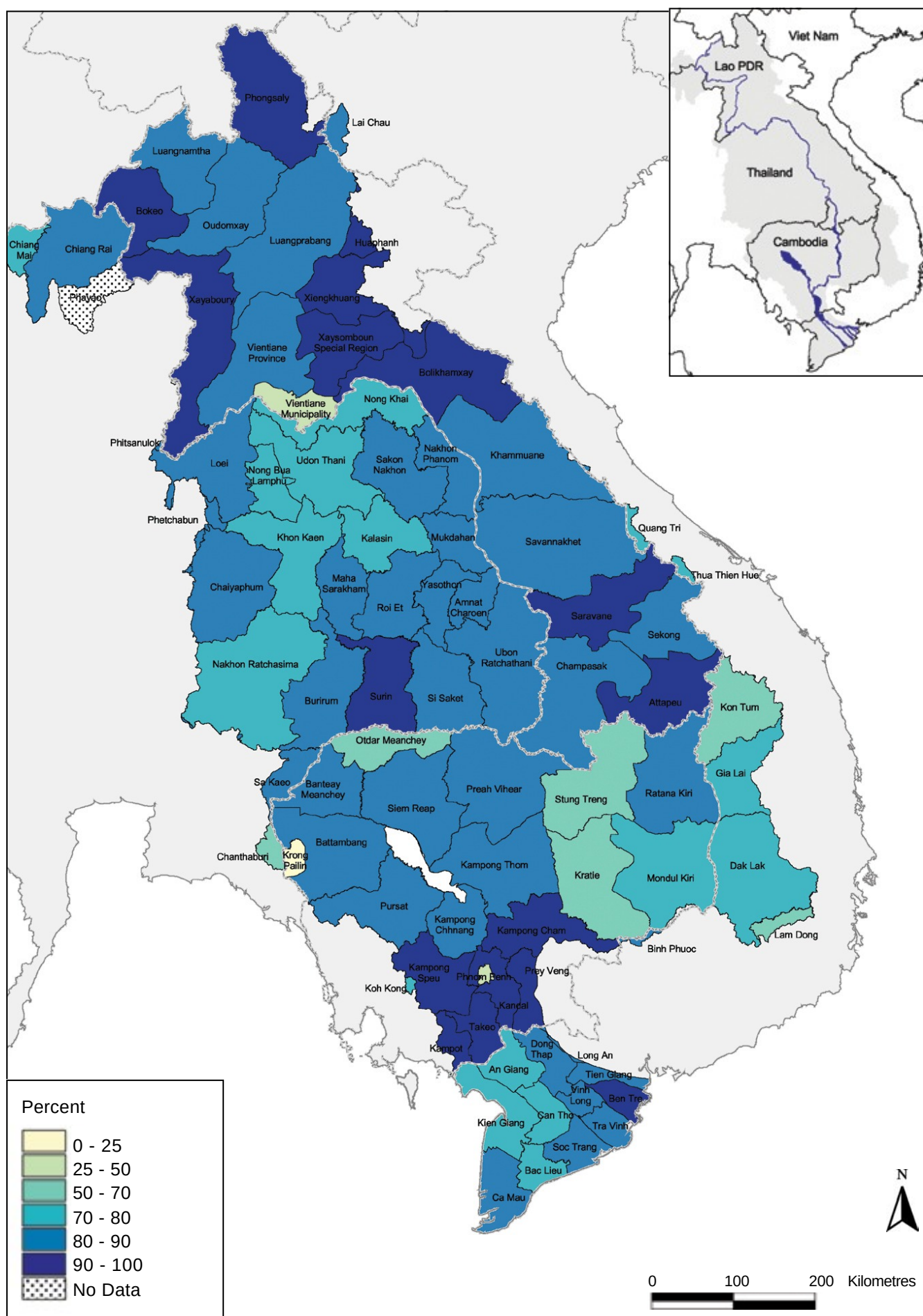
The provinces of the Central Highlands exhibit very high population growth rates, with the population of Dak Lak increasing at five percent per annum. These rates are explained partly by comparatively high fertility rates and partly by large-scale in-migration (Map 19).

If current population growth trends continue, Cambodia and Lao PDR will nearly double their present populations within 20 years. Over the same period, the national populations of Thailand and Viet Nam are expected to increase by 20-30 percent.

Country	Indicator Definition	Source	Table
Cambodia	National population growth rate (1998)	Population Census 1998	
Lao PDR	Increase in average mid-year provincial population (2000-2001)	Statistical Yearbook 2001	Table 25
Thailand	Average annual population growth rate (1990-2000)	Population Census 2000	Table 2
Viet Nam	Annualized population growth (1989-1999)	Viet Nam Human Development Report 2001	Table 5

Map 4: Rural Population

Proportion of population living in rural areas



Map 4: Rural Population

Proportion of population living in rural areas

The LMB is a predominantly rural region. Approximately 80 percent of the population live in rural areas and rely on natural resources for their livelihoods. They are subsistence farmers who supplement what they grow with the fish they catch and the food and other materials they gather from forests and wetlands. Because of remoteness and lower incomes, people living in rural areas tend to fare more poorly than those in urban areas in many of the indicators of social development.

People generally live in small, dispersed villages, and district and provincial towns. Throughout the LMB, variations in the proportions of rural population result from a number of factors. Towns attract people because they offer better access to services, markets and transportation. Also, as in Lao PDR, government programs have relocated people from remote highland areas to towns in an effort to stop shifting cultivation.

In the central provinces of Northeast Thailand, a highway between Bangkok and Vientiane (in Lao PDR) has led to a greater concentration of population in towns and small cities. A similar settlement pattern may occur as a result of future major transportation infrastructure developments such as the ADB sponsored East-West Corridor.

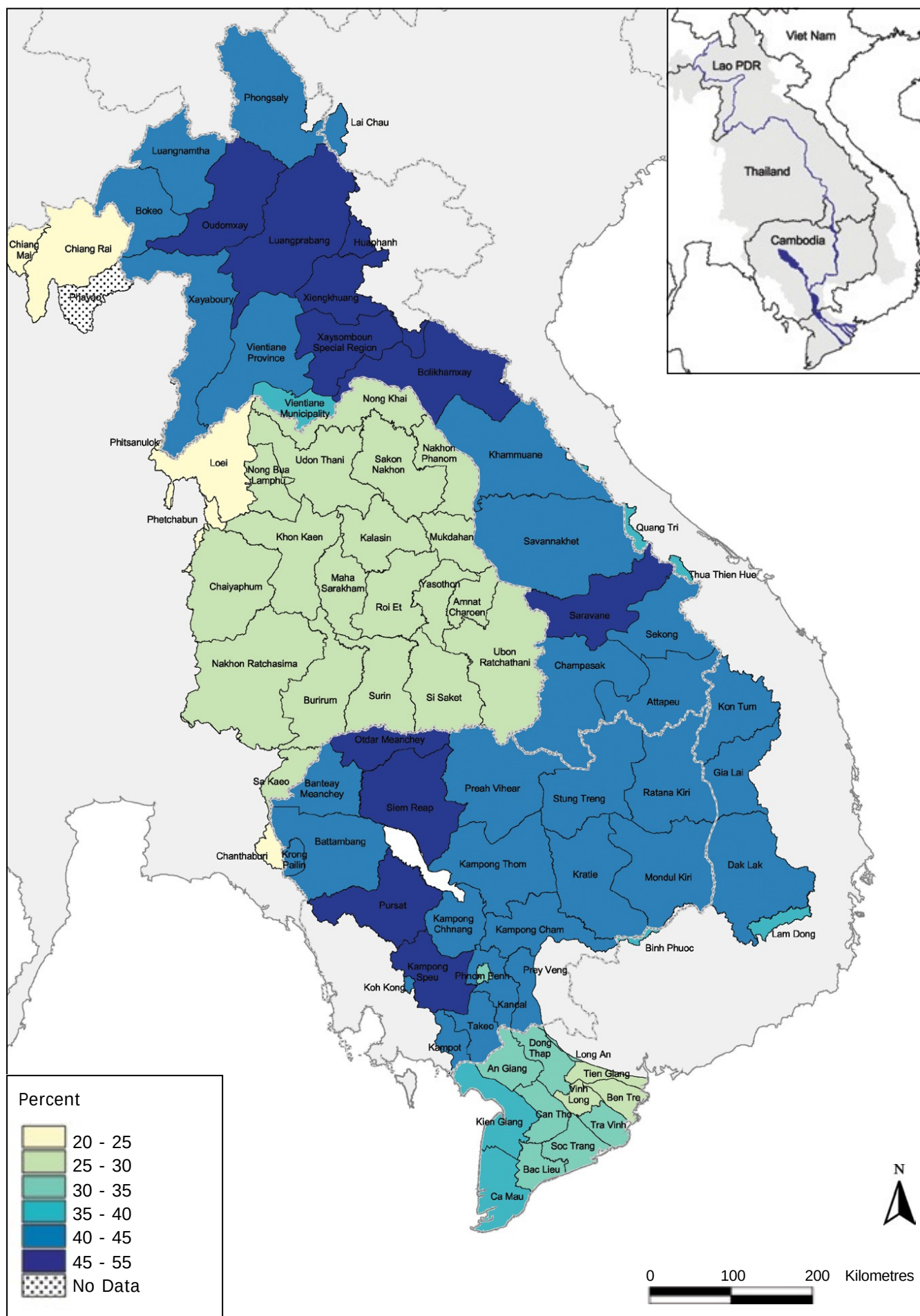
In some provinces in northern and eastern Cambodia, very small overall populations are concentrated in district and provincial towns. As a result, these provinces have substantially lower proportions of rural population than other parts of the country, even though their urban centres are comparatively small.

In the cases of Phnom Penh, Pailin and Vientiane Municipality, the administrative units correspond largely to the territory of the urban centres (see Map 46 for further information about urban and peri-urban development in the LMB).

Country	Indicator Definition	Source	Table
Cambodia	Percentage of population living outside of urban areas (1998). Districts containing cities and provincial headquarter towns are treated as urban areas.	Population Census 1998	PopMap
Lao PDR	Percentage of population living in rural areas (1995)	Population Census 1995	Table 2.2
Thailand	Percentage of population living outside of municipal areas (2000)	Population Census 2000	Key Ind.
Viet Nam	Rural population as a percentage of total population (1999). Urban areas include urban districts of cities, urban quarters, and towns.	Population Census 1999	Table 1.1

Map 5: Age Structure - Child Population

Proportion of population aged 0-14



Map 5: Age Structure - Child Population

Proportion of population aged 0-14

Children under the age of 14 make up high proportions of the populations of Cambodia and Lao PDR. The differences between these countries and Thailand and Viet Nam reflect very different fertility rates over the last 15 years.

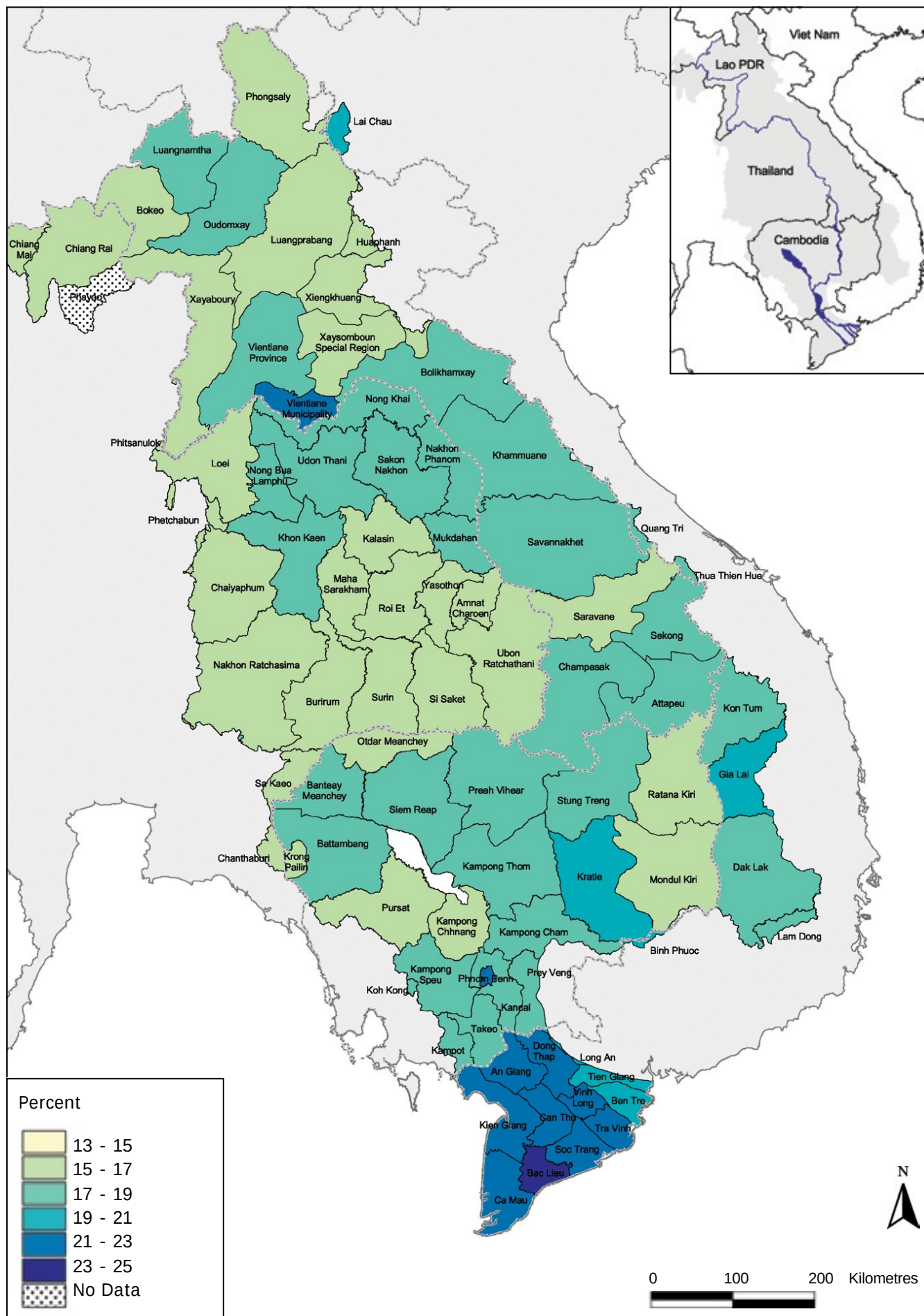
Cambodia and Lao PDR experienced post-war baby booms in the 1980s. As hostilities ceased and family life returned to normal, there was a surge in births. High birth rates continued in the 1990s, and children today constitute more than 40 percent of the population. This situation results in high dependency ratios (see Maps 9-10). It also has important implications for current demands for primary education and childhood health services (see Health Maps and Education Maps).

The lower proportions of children in the populations of the Mekong Delta and the Korat Plateau reflect fertility rates that have dropped to near or below replacement levels (2.1 children/family). Contributing factors include higher education levels among women, greater opportunities for non-farm employment and higher incomes, and government programs promoting birth spacing and smaller families.

Country	Indicator Definition	Source	Table
Cambodia	Proportion of population aged 0-14 (1998)	Population Census 1998	Table A1
Lao PDR	Proportion of population aged 0-14 (1995)	Population Census 1995	Table 1C
Thailand	Proportion of population aged 0-14 (2000)	Population Census 2000	Table 2
Viet Nam	Proportion of population aged 0-14 (1999)	Population Census 1999	Table 1.5

Map 6: Age Structure - Youth Population

Proportion of population aged 15-24



Map 6: Age Structure - Youth Population

Proportion of population aged 15-24

The proportions of the population aged 15-24 are similar across most provinces in Cambodia, Lao PDR and Thailand. Many Cambodians and Lao in this age group were born during the 1970s, when their countries were embroiled in civil strife and war. Despite generally higher fertility rates than in Thailand, Cambodian and Lao women had fewer children during this difficult period. Also, many children died from the effects of war, further reducing the number of youth today.

The Mekong Delta has a higher proportion of youth than the rest of the basin. This is the result of the post-war baby boom in Viet Nam that started in the mid-1970s, that is, 5-10 years earlier than in Cambodia and Lao PDR.

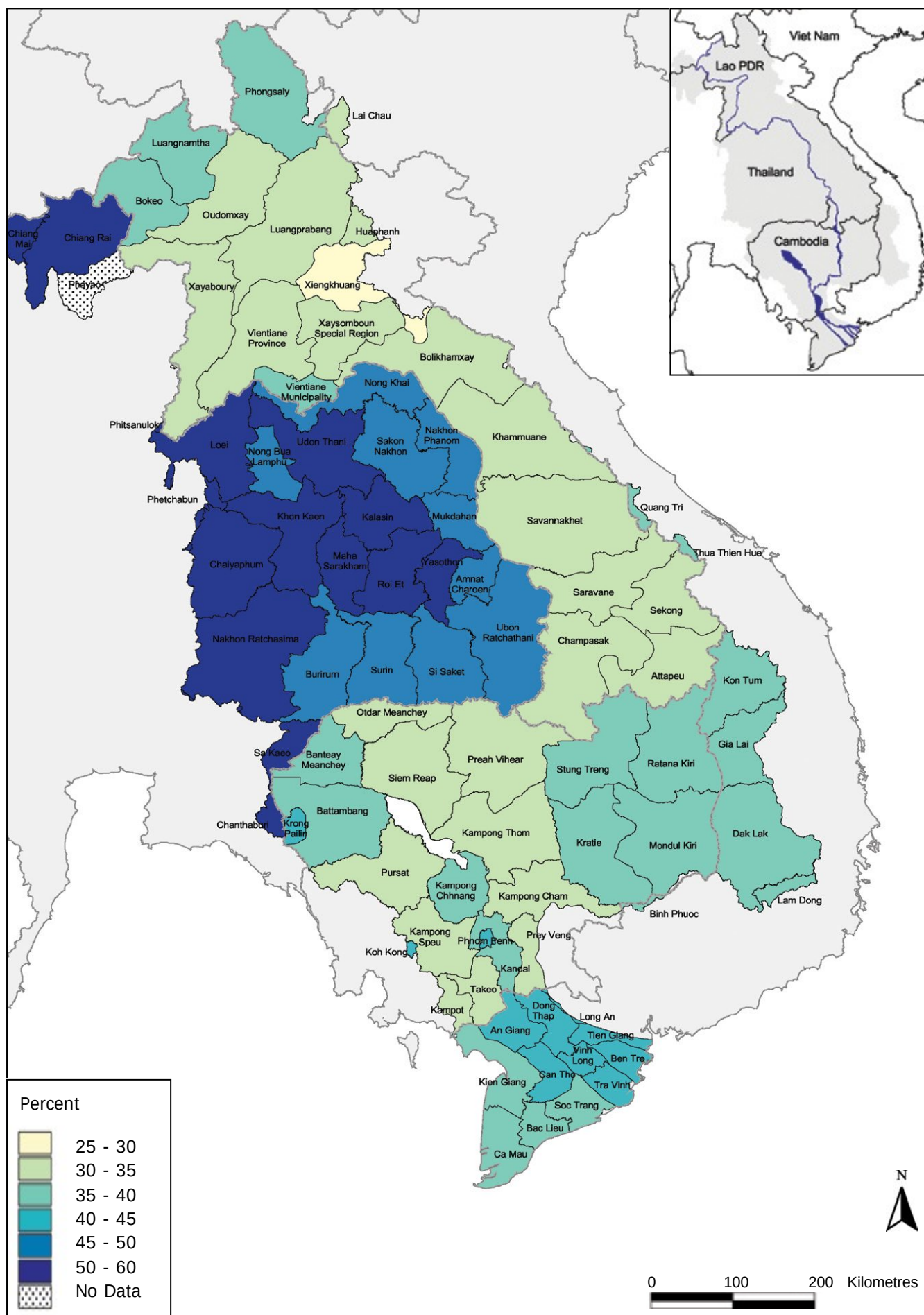
Phnom Penh in Cambodia and Vientiane Municipality in Lao PDR have comparatively high proportions of youth in their populations. These urban centres attract large numbers of young migrants from the provinces in search of employment and education.

The proportion of youth in the LMB population will grow dramatically in coming years as children reach this age group. This has important implications for the demand for educational and other services to meet their needs. It will also put great strains on the labour market to provide sufficient jobs for this age group.

Country	Indicator Definition	Source	Table
Cambodia	Proportion of population aged 15-24 (1998)	Population Census 1998	Table A1
Lao PDR	Proportion of population aged 15-24 (1995)	Population Census 1995	Table 1C
Thailand	Proportion of population aged 15-24 (2000)	Population Census 2000	Table 2
Viet Nam	Proportion of population aged 15-24 (1999)	Population Census 1999	Table 1.5

Map 7: Age Structure - Adult Population

Proportion of population aged 25-64



Map 7: Age Structure - Adult Population

Proportion of population aged 25-64

The low proportions of adults (25 to 64 years) in much of the LMB are a legacy of wars and civil strife in Cambodia, Lao PDR and Viet Nam. Millions of people died between the 1960s and the 1980s. As a result the number of adults, particularly adults over 40, is very low when compared with other countries in the region.

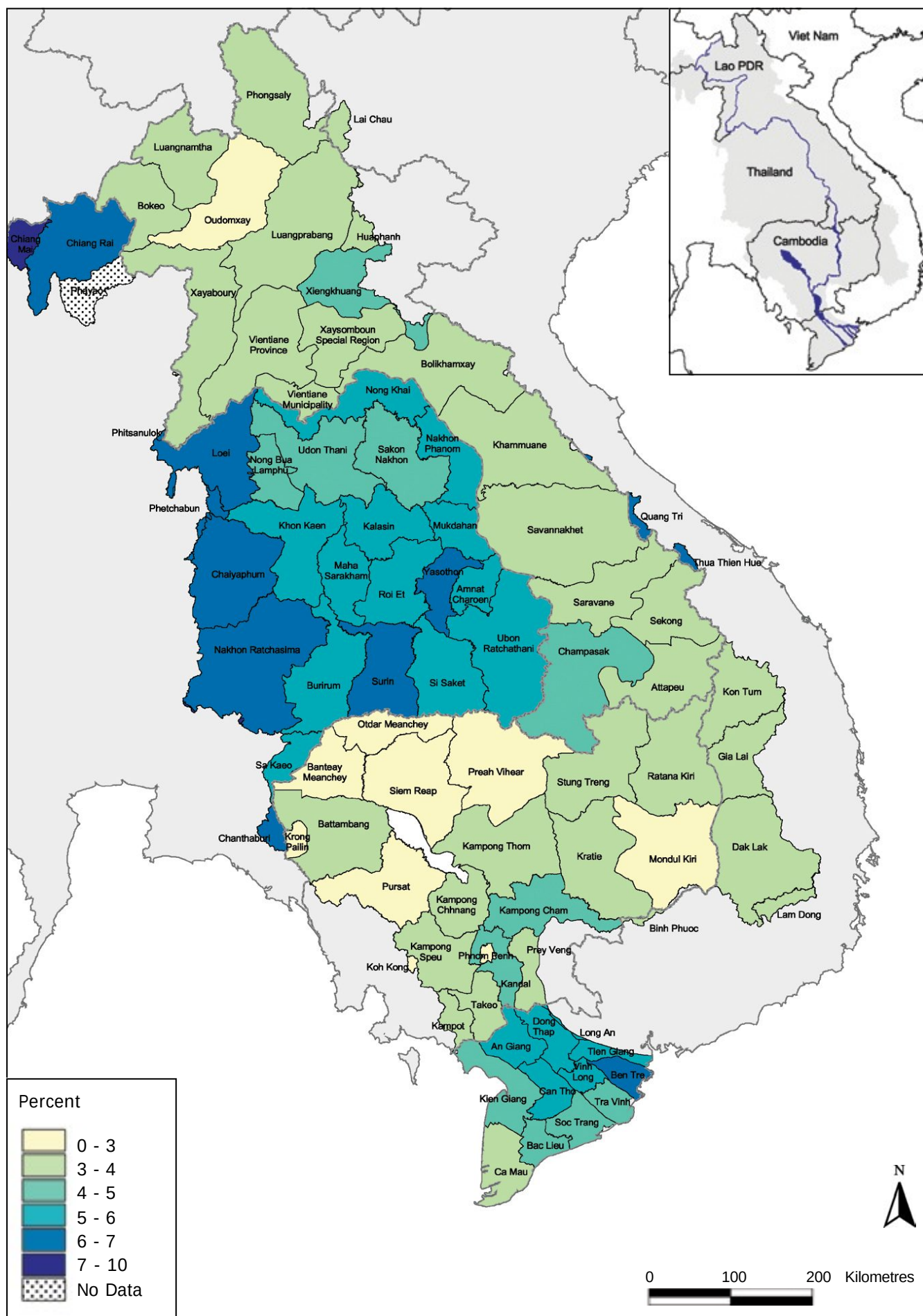
In Northeast Thailand, adults comprise about half the population, with slightly lower proportions in the eastern provinces of the Korat Plateau. Many adults migrate from this region to seek work in Bangkok and the regional urban centres.

As the youth population matures, the adult populations of LMB countries will also expand rapidly in coming years. With lower birth rates, the proportions of adults will become larger. A significant benefit of this demographic transition will be greater numbers of adults to support dependent children and elderly (see also Maps 9 to 10).

Country	Indicator Definition	Source	Table
Cambodia	Proportion of population aged 25-64 (1998)	Population Census 1998	Table A1
Lao PDR	Proportion of population aged 25-64 (1995)	Population Census 1995	Table 1C
Thailand	Proportion of population aged 25-64 (2000)	Population Census 2000	Table 2
Viet Nam	Proportion of population aged 25-64 (1999)	Population Census 1999	Table 1.5

Map 8: Age Structure - Elderly Population

Proportion of population aged 65 and over



Map 8: Age Structure - Elderly Population

Proportion of population aged 65 and over

The low proportion of elderly (65 years and older) and the variations across the LMB can be explained in terms of life expectancy.

Low life expectancy in Cambodia and Lao PDR (see Maps 34 to 35) means that, on average, few people live beyond their mid-fifties. Poor health conditions and the lingering effects of war and civil strife account for the short life spans.

People in Thailand and Viet Nam tend to live up to 15 years longer and make up greater proportions of the populations of the Korat Plateau and the Mekong Delta.

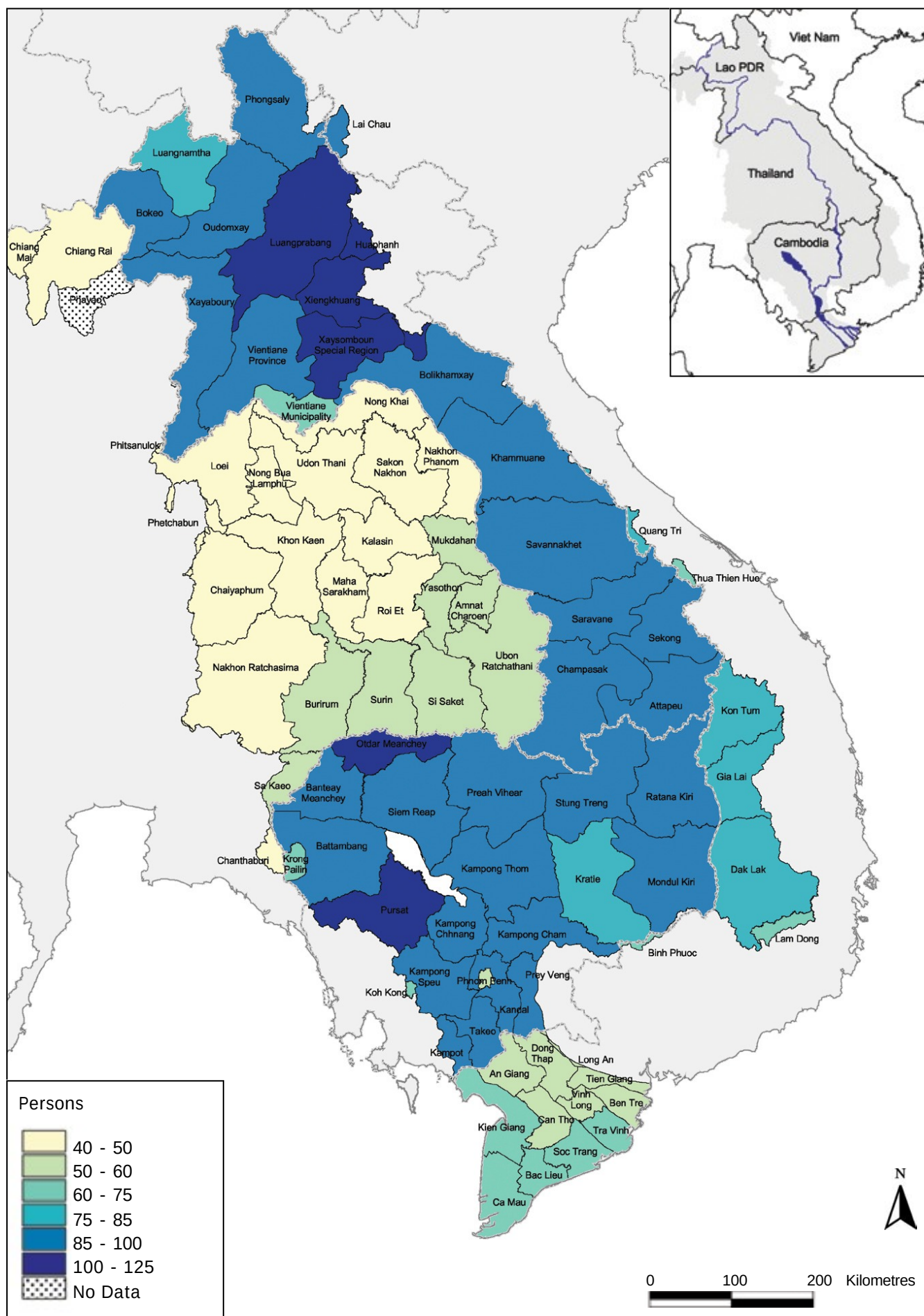
In the Central Highlands of Viet Nam, however, the proportion of elderly is similar to Cambodia and Lao PDR. There are many ethnic minority groups living in this region who tend to have lower life expectancies than people living elsewhere in the country. There has also been substantial in-migration of younger people to the Central Highlands.

The elderly population of the LMB will increase in coming years, as the general population ages and health conditions improve. Although the relative proportion of elderly will remain small, there will be a growing need for the provision of social services to meet the needs of older people.

Country	Indicator Definition	Source	Table
Cambodia	Proportion of population aged 65 and over (1998)	Population Census 1998	Table A1
Lao PDR	Proportion of population aged 65 and over (1995)	Population Census 1995	Table 1C
Thailand	Proportion of population aged 65 and over (2000)	Population Census 2000	Table 2
Viet Nam	Proportion of population aged 65 and over (1999)	Population Census 1999	Table 1.5

Map 9: Dependency Ratio

Persons aged 0 to 14 and 65 and older, per 100 persons aged 15 to 64



Map 9: Dependency Ratio

Persons aged 0 to 14 and 65 and older, per 100 persons aged 15 to 64

The dependency ratio measures the number of dependents who must be supported by working-age adults. Dependents include children under 15 years and the elderly (65 years and older). A dependency ratio of 100, for example, means that each working adult must, on average, provide for the needs of one other, non-working household member.

Cambodia and Lao PDR have dependency ratios that exceed 80, with rates above 100 in several provinces in central Lao PDR. The loss of many adults in these countries, combined with large populations of young children, account for the high rates.

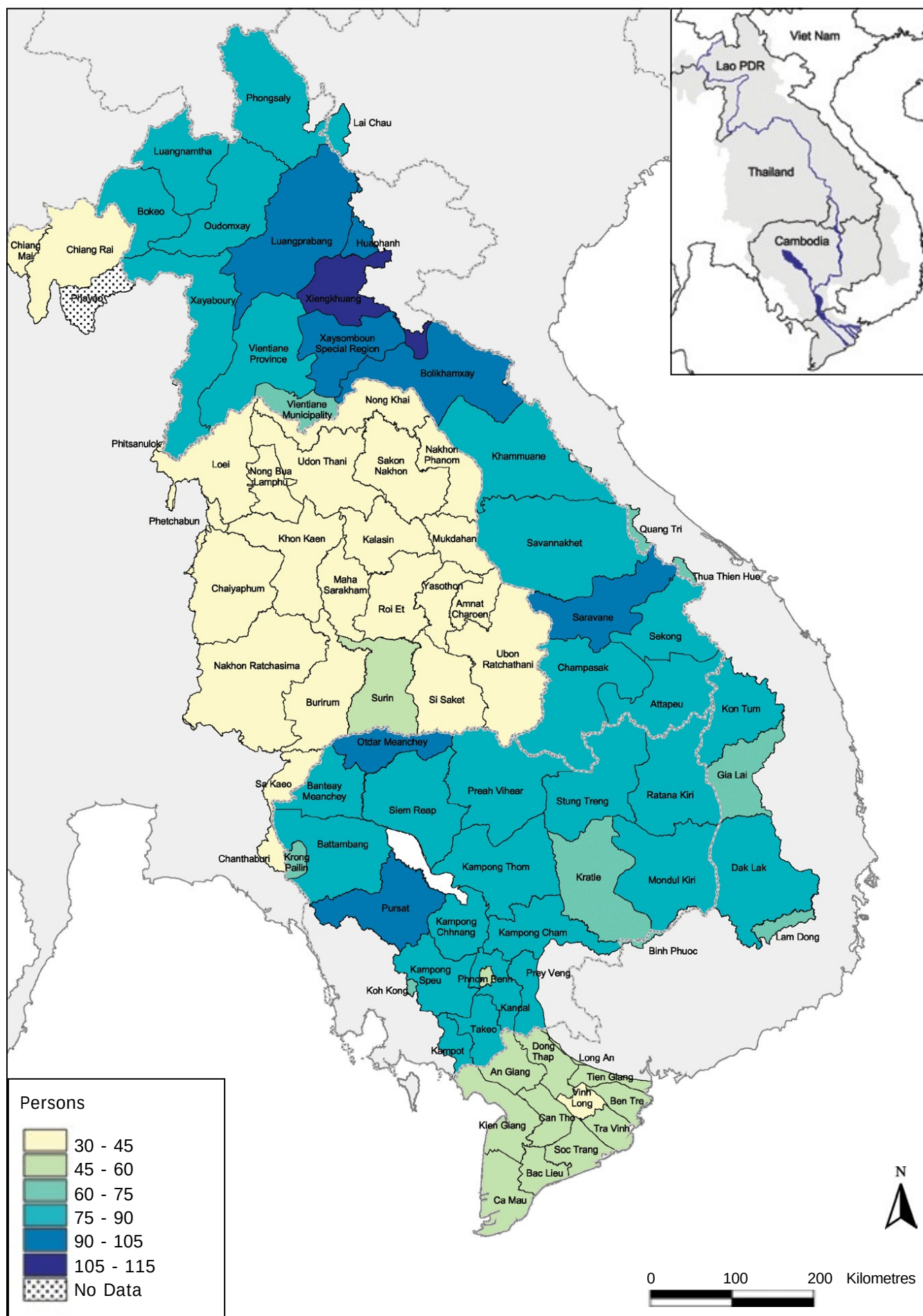
Lower dependency ratios in the Mekong Delta and in Thailand reflect the larger number of working adults, as well as the smaller number of children.

With the exception of Thailand, dependency ratios in the LMB are currently well above the 1999 average of 60 for the East Asia and Pacific region (World Bank 2002). There are strong links between high dependency ratios and levels of poverty in the LMB (see Map 27).

Country	Indicator Definition	Source	Table
Cambodia	Ratio of the population aged 0 to 14 years and 65 years and older, to the population aged 15 to 64 years (1998)	Population Census 1998	PopMap
Lao PDR	Ratio of the population aged 0 to 14 years and 65 years and older, to the population aged 15 to 64 years (1995)	Population Census 1995	Table 1C
Thailand	Ratio of the population aged 0 to 14 years and 65 years and older, to the population aged 15 to 64 years (2000)	Population Census 2000	Table 2
Viet Nam	Ratio of the population aged 0 to 14 years and 65 years and older, to the population aged 15 to 64 years (1999)	Population Census 1999	Table 1.5

Map 10: Child Dependency Ratio

Persons aged 0 to 14 years, per 100 persons aged 15 to 64 years



Map 10: Child Dependency Ratio

Persons aged 0 to 14 years, per 100 persons aged 15 to 64 years

Child and elderly dependency ratios measure the proportion of each age group separately in relation to the number of working-age adults.

Child dependency ratios range from 75 to 90 for most provinces in Cambodia and Lao PDR. That is, children account for approximately 90 percent of the total dependency rate in these countries. The same is true in the Central Highlands of Viet Nam.

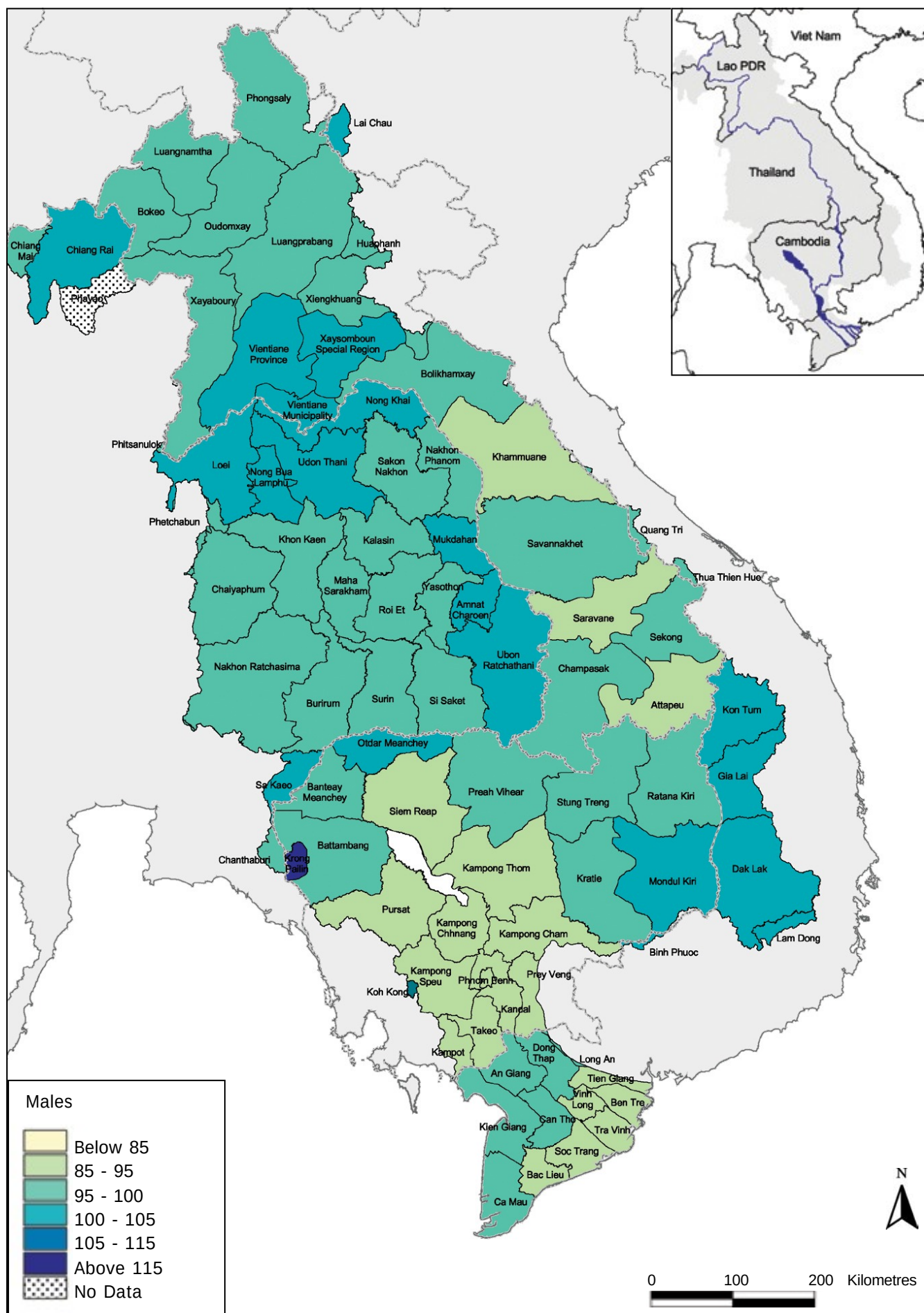
Child dependency ratios are lower in the Mekong Delta and Northeast Thailand, accounting for 70 to 75 percent of total dependency. In both of these countries fertility rates have been decreasing over the last 10 years, which explains the lower numbers of children as a percentage of the entire population.

There are contradictory forces acting on age dependency ratios. Child dependency ratios will tend to decline as young people become adults and, in general, have fewer children than their parents. At the same time, elderly dependency ratios will increase as people live longer. This transition has already begun in Thailand and Viet Nam.

Country	Indicator Definition	Source	Table
Cambodia	Ratio of the population aged 0 to 14 years to the population aged 15 to 64 years (1998)	Population Census 1998	Table A1
Lao PDR	Ratio of the population aged 0 to 14 years to the population aged 15 to 64 years (1995)	Population Census 1995	Table 1C
Thailand	Ratio of the population aged 0 to 14 years to the population aged 15 to 64 years (2000)	Population Census 2000	Table 2
Viet Nam	Ratio of the population aged 0 to 14 years to the population aged 15 to 64 years (1999)	Population Census 1999	Table 1.5

Map 11: Gender Ratio

Number of males per 100 females (all ages)



Map 11: Gender Ratio

Number of males per 100 females (all ages)

The gender ratio measures the number of men for every 100 women in the population. Gender ratios in the LMB are generally less than 100, indicating that women outnumber men in most provinces.

Economic forces affect gender ratios in the LMB, with men often migrating out of rural areas to seek employment in urban centres. For example, men migrate from Northeast Thailand to Bangkok or Chiang Mai.

While men have traditionally been more likely to migrate for economic reasons, women are increasingly migrating to urban centres to work in the manufacturing (generally textiles) and service sectors (such as hotels and restaurants).

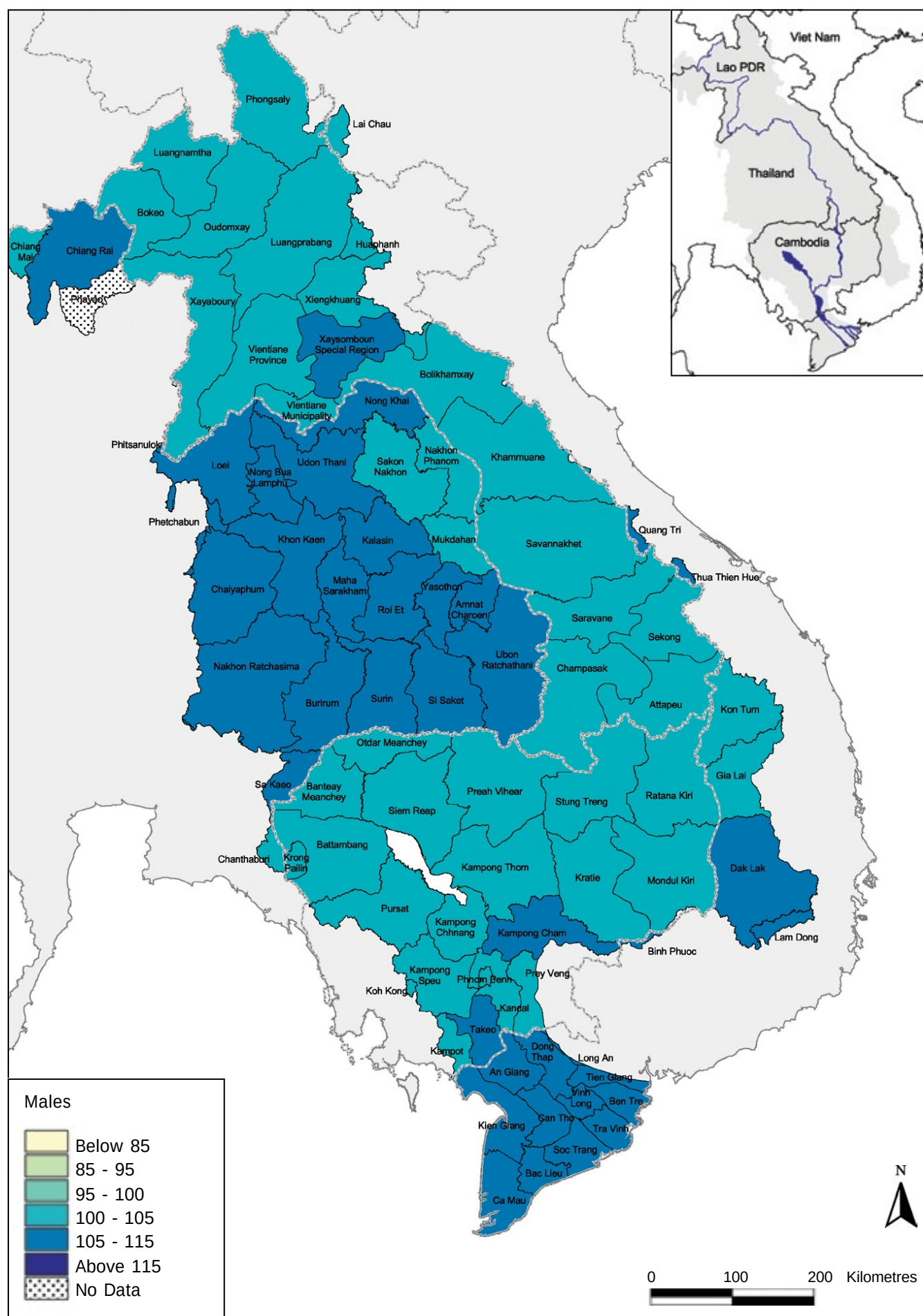
In Cambodia and, to a lesser extent, Lao PDR, war and civil strife have influenced the gender ratio. Many more men than women died in conflicts that occurred from the early 1970s, and in Cambodia, did not finish until the 1990s. This is reflected in lower numbers of men in urban as well as rural areas.

In several provinces, men outnumber women. The province of Krong Pailin is a centre for the logging and mining industries in Cambodia, and has a gender ratio of 117. In the Central Highlands of Viet Nam, government programmes to promote economic development have resulted in the in-migration of labourers who are disproportionately male.

Country	Indicator Definition	Source	Table
Cambodia	Number of males per 100 females, all ages (1998)	Population Census 1998	PopMap
Lao PDR	Number of males per 100 females, all ages (1995)	Population Census 1995	Table 1C
Thailand	Number of males per 100 females, all ages (2000)	Population Census 2000	Key Ind.
Viet Nam	Number of males per 100 females, all ages (1999)	Population Census 1999	Table 1.5

Map 12: Child Gender Ratio

Number of males per 100 females (0-14 years)



Map 12: Child Gender Ratio

Number of males per 100 females (0-14 years)

The child gender ratio measures the number of boys under the age of 15 in relation to the number of girls of the same age.

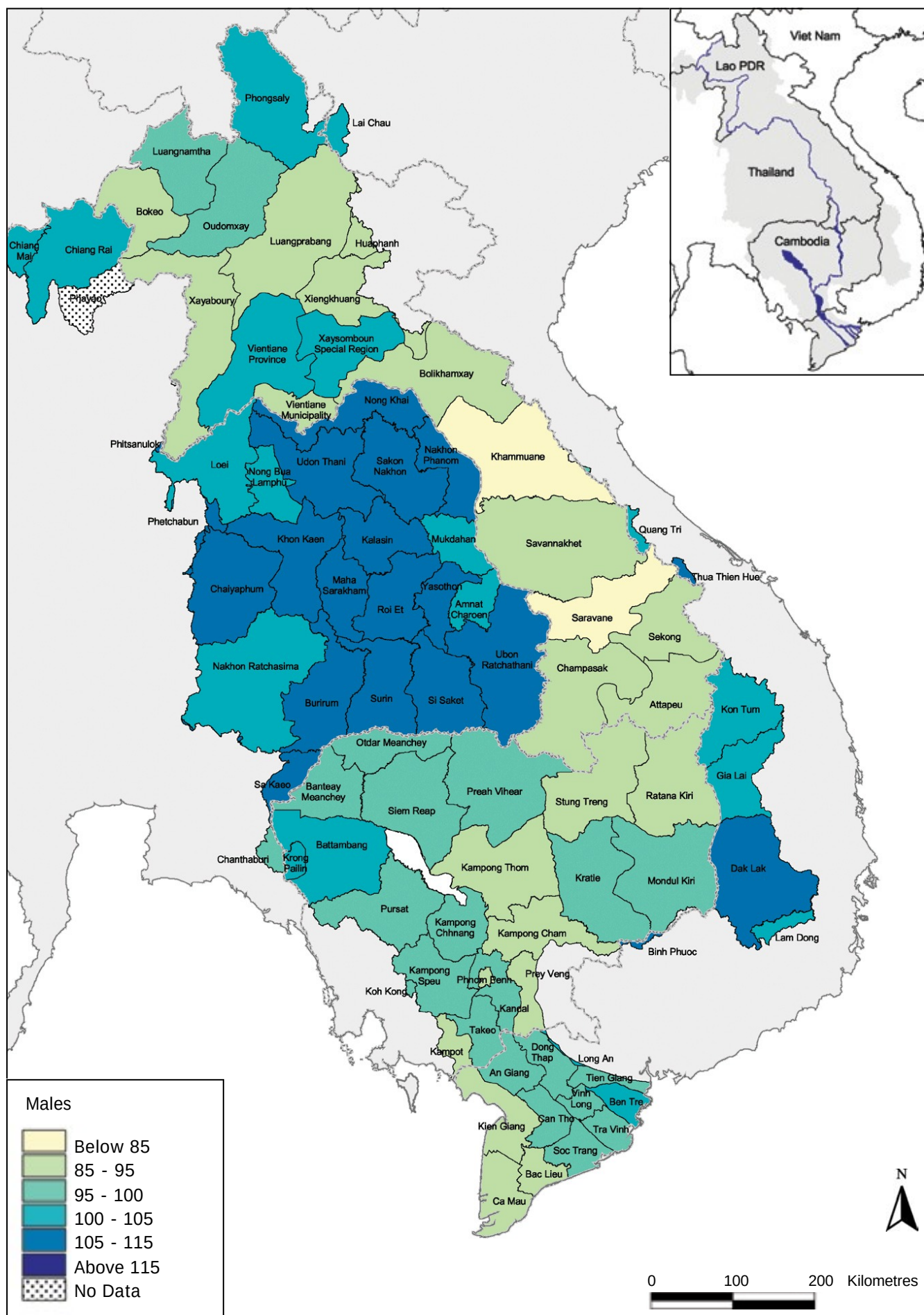
In general, the child gender ratio is over 100, that is, more boys are born than girls. The child gender ratios in the LMB range from 100 to 107, reflecting normal international patterns for gender ratios at birth.

Higher infant and child mortality rates for boys than girls mean that the gender ratio for a group of children becomes more balanced as they age.

Country	Indicator Definition	Source	Table
Cambodia	Number of males per 100 females, 0-14 years (1998)	Population Census 1998	PopMap
Lao PDR	Number of males per 100 females, 0-14 years (1995)	Population Census 1995	Table 1C
Thailand	Number of males per 100 females, 0-14 years (2000)	Population Census 2000	Key Ind.
Viet Nam	Number of males per 100 females, 0-14 years (1999)	Population Census 1999	Table 1.5

Map 13: Youth Gender Ratio

Number of males per 100 females (15-24 years)



Map 13: Youth Gender Ratio

Number of males per 100 females (15-24 years)

The youth gender ratio measures the number of young men aged 15 to 24 in relation to the number of young women of the same age.

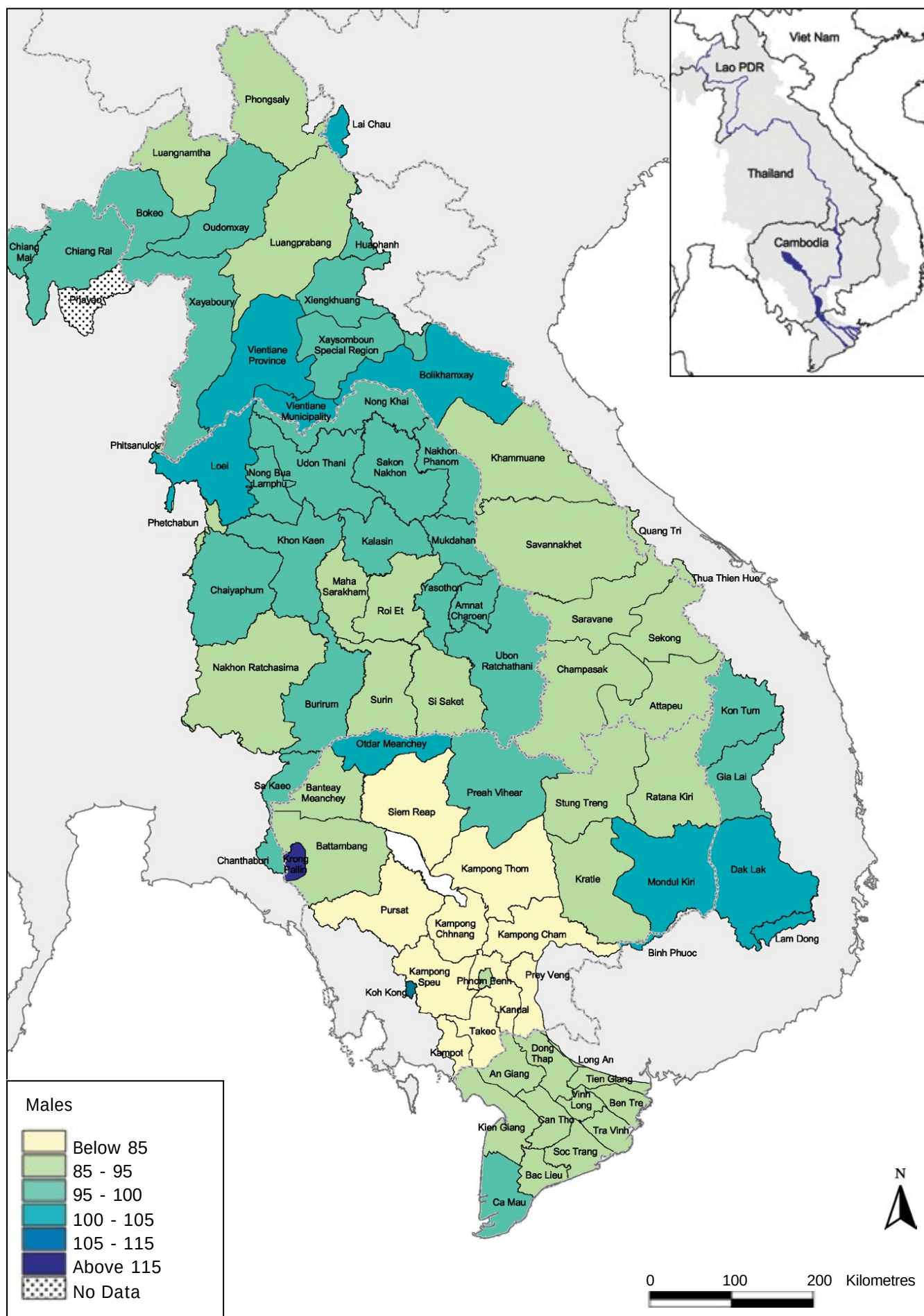
Youth gender ratios above 105 in many provinces in Northeast Thailand may reflect several factors. Infant and child mortality rates are generally very low in Thailand, with most boys and girls surviving to adolescence. It would also appear that young men tend to remain in the region to study or work.

Youth gender ratios below 100 in Cambodia, Lao PDR and the Mekong Delta suggest that by this age young men are leaving their homes to search for work. On the other hand, gender ratios above 100 in the Central Highlands may be the result of the in-migration of young men seeking work.

Country	Indicator Definition	Source	Table
Cambodia	Number of males per 100 females, 15-24 years (1998)	Population Census 1998	PopMap
Lao PDR	Number of males per 100 females, 15-24 years (1995)	Population Census 1995	Table 1C
Thailand	Number of males per 100 females, 15-24 years (2000)	Population Census 2000	Key Ind.
Viet Nam	Number of males per 100 females, 15-24 years (1999)	Population Census 1999	Table 1.5

Map 14: Adult Gender Ratio

Number of males per 100 females (25-64 years)



Map 14: Adult Gender Ratio

Number of males per 100 females (25-64 years)

The adult gender ratio measures the number of men aged 25 to 64 years in relation to the number of women of the same age.

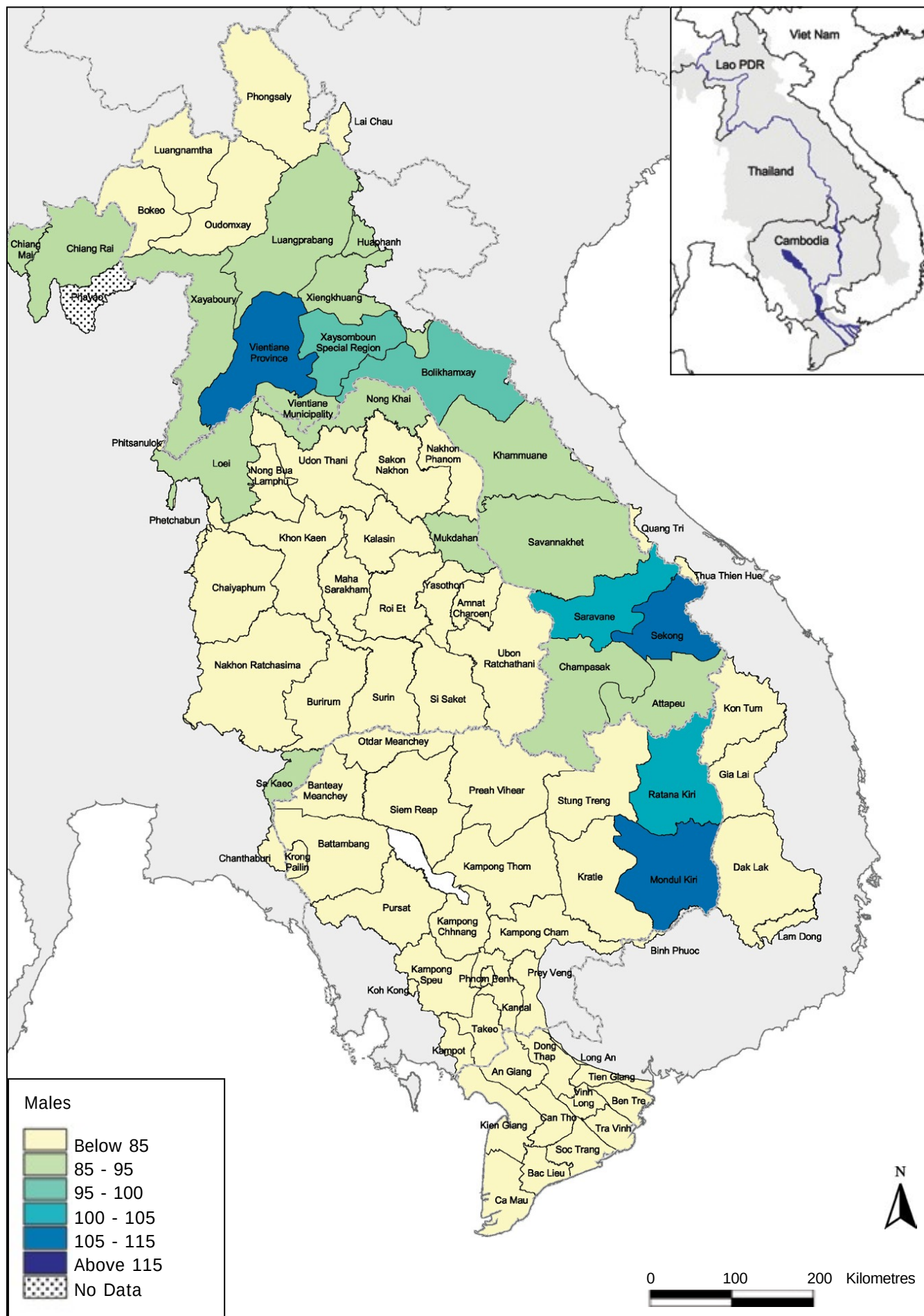
Throughout most of the LMB, adult women outnumber adult men. That is, the gender ratio for the entire population (Map 10) is largely a result of the adult gender ratio. The low number of adult men is due to economic migration to urban centres (outside the basin in the case of Thailand and Viet Nam) and the greater number of men who died during wars and civil strife in Cambodia, Lao PDR and Viet Nam.

The gender imbalance is greatest in the Tonle Sap region and provinces near Phnom Penh, with gender ratios between 70 and 80. The percentage of households headed by women also tends to be greatest in these provinces (Map 17). This suggests that many women were widowed, or have husbands who have migrated to seek work elsewhere.

Country	Indicator Definition	Source	Table
Cambodia	Number of males per 100 females, 25-64 years (1998)	Population Census 1998	PopMap
Lao PDR	Number of males per 100 females, 25-64 years (1995)	Population Census 1995	Table 1C
Thailand	Number of males per 100 females, 25-64 years (2000)	Population Census 2000	Key Ind.
Viet Nam	Number of males per 100 females, 25-64 years (1999)	Population Census 1999	Table 1.5

Map 15: Elderly Gender Ratio

Number of males per 100 females (65 years and over)



Map 15: Elderly Gender Ratio

Number of males per 100 females (65 years and over)

The elderly gender ratio measures the number of men over the age of 65 years in relation to the number of women of the same age.

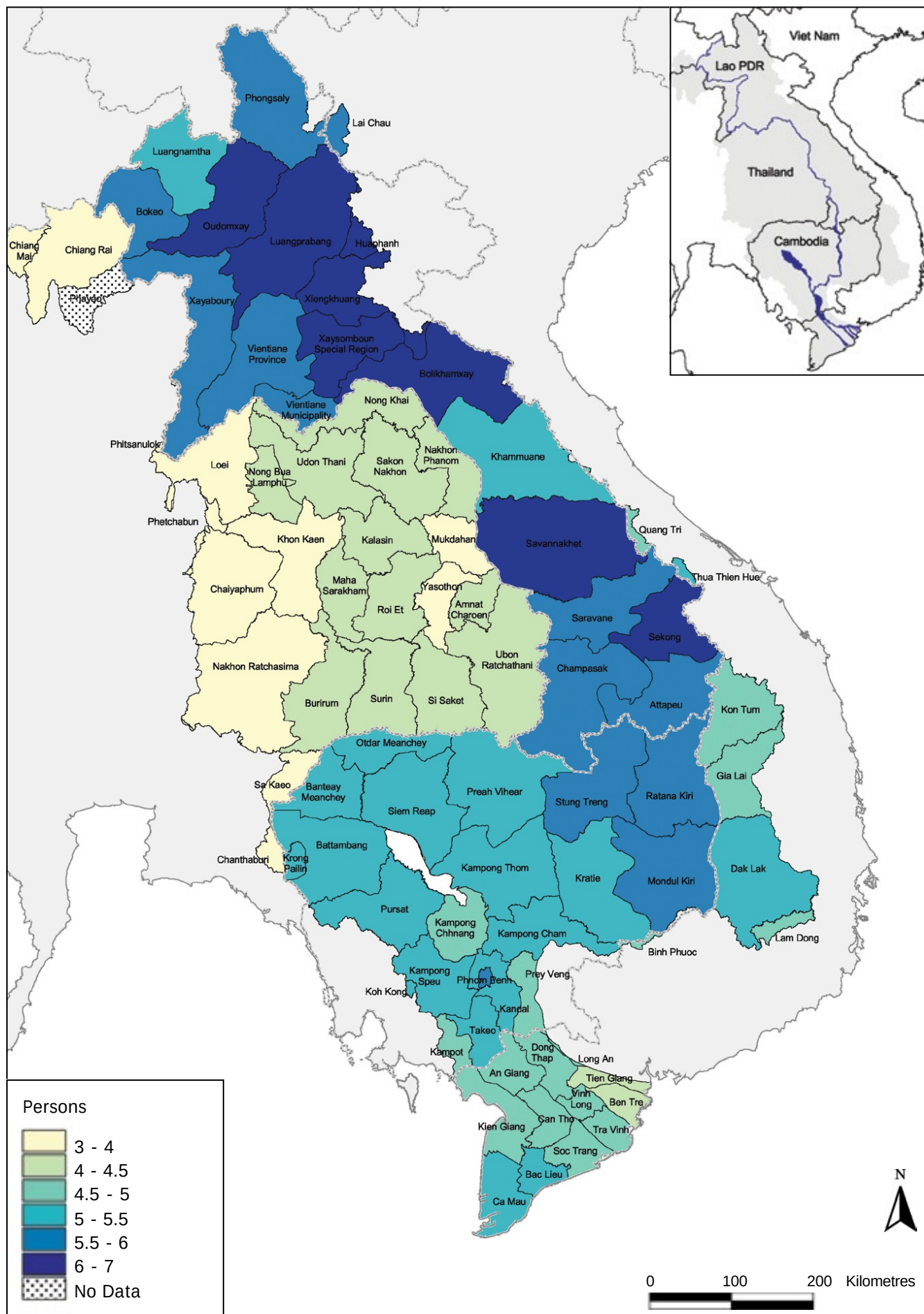
In the LMB, women tend to live 4 to 6 years longer than men. Therefore, the gender ratio tends to be well below 100 among elderly people. Higher gender ratios among the elderly in Lao PDR may be explained by very small differences in life expectancy for men and women (see Maps 34 and 35).

Those provinces where the elderly gender ratio is above 100 (particularly Mondulkiri and Ratanakiri in Cambodia, and Sekong in Lao PDR) tend to have very small elderly populations, meaning that it is more likely that random variations in death rates will have more influence on the sex ratio than the broader trends discussed above.

Country	Indicator Definition	Source	Table
Cambodia	Number of males per 100 females, 65 years and over (1998)	Population Census 1998	Table A1
Lao PDR	Number of males per 100 females, 65 years and over (1995)	Population Census 1995	Table 1C
Thailand	Number of males per 100 females, 65 years and over (2000)	Population Census 2000	Key Ind.
Viet Nam	Number of males per 100 females, 65 years and over (1999)	Population Census 1999	Table 1.5

Map 16: Household Size

Average number of persons per household



Map 16: Household Size

Average number of persons per household

In rural areas of the LMB, households are the basic social and economic unit. The traditional household is large, often including several generations. Many children help the adults to produce food and meet other needs. As adults, children ensure the care of their parents and grandparents when they can no longer work.

The average household size in Cambodia and Lao PDR is 5 to 6 persons, reflecting that many people in these parts of the LMB still pursue traditional, subsistence livelihoods. The more remote areas of Northern and Central Lao PDR have households with, on average, 6 to 7 persons.

The average household size in Thailand has dropped from 6 to 4 persons. A similar transition is occurring in Viet Nam. At the same time, the number of households is increasing.

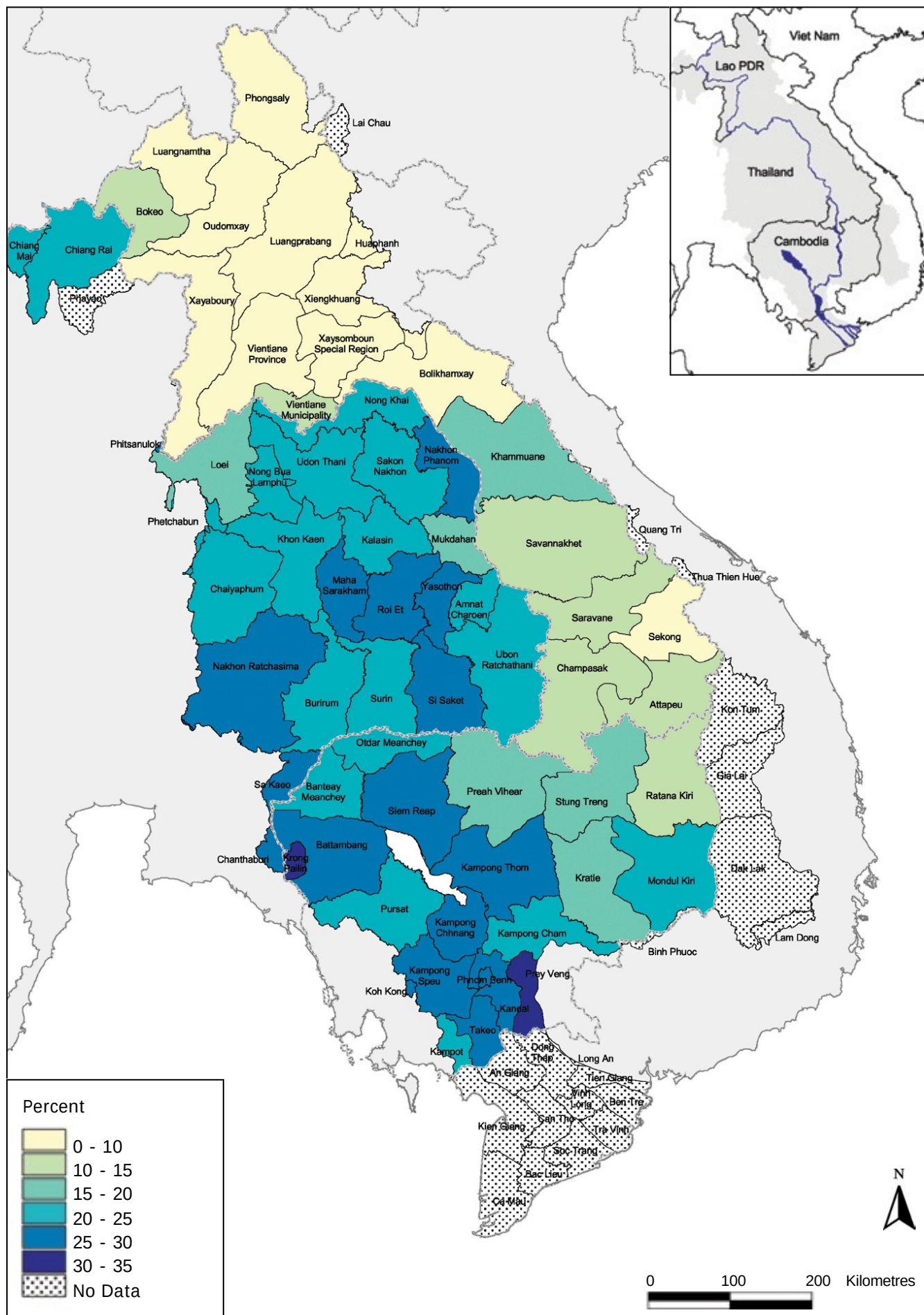
Several factors account for declines in household size. Governments are promoting smaller families, with observable results in Thailand and Viet Nam. As economic opportunities and incomes improve in these countries, families tend to become smaller. In addition to these factors, reductions in infant and child mortality rates in Cambodia and Lao PDR will encourage families to have fewer children.

Interestingly, Phnom Penh has larger household sizes than most rural areas in Cambodia. This may reflect households that include relatives who have migrated from rural home communities to study or work in the city.

Country	Indicator Definition	Source	Table
Cambodia	Average number of persons per household (1998)	Population Census 1998	PopMap
Lao PDR	Average number of persons per household (1995)	Population Census 1995	Table 3.1
Thailand	Average number of persons per household (2000)	Population Census 2000	Key Ind.
Viet Nam	Average number of persons per household (1999)	Population Census 1999	Table 1.3

Map 17: Female Household Headship

Proportion of households headed by females



Map 17: Female Household Headship

Proportion of households headed by females

Men head most households in the LMB. The proportion of households that are headed by women ranges from 5 to 10 percent in Lao PDR to over 30 percent in parts of Cambodia.

Female household heads tend to be women who are widowed or divorced, or married women whose husbands are away working. The proportion of female household heads is higher among older women.

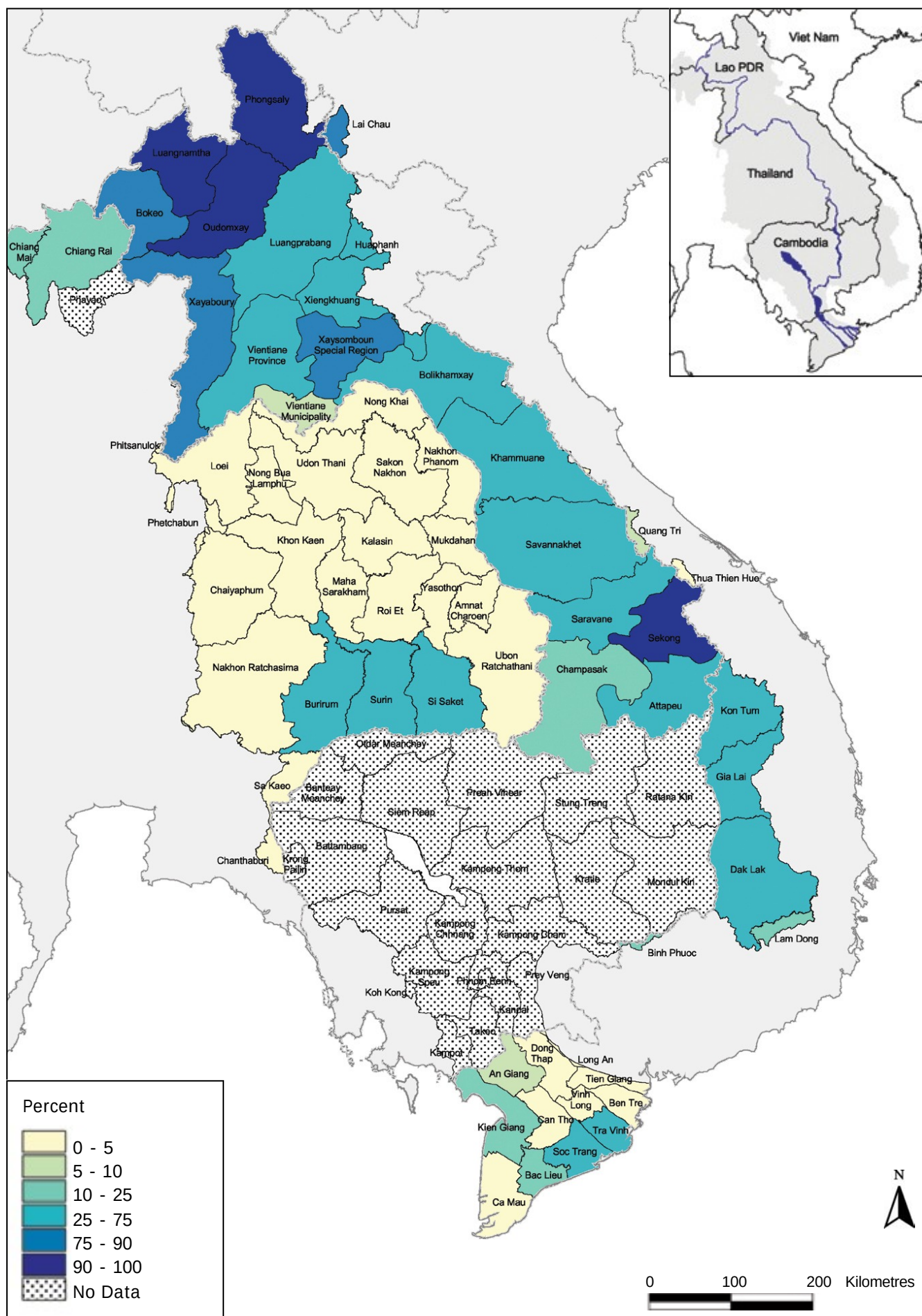
In Cambodia, Lao PDR and Viet Nam, the incidence of female-headed households in urban areas is approximately twice the rate in rural areas (FAO n.d., Huguet et al. 2000, NSC-Lao PDR 1997). In Viet Nam, for example, women head 50 percent of urban households, but only 28 percent of rural households. Poor rural women raising families alone are more likely to lose their land and migrate to urban areas.

The rate of female headship may be underestimated in the LMB. For cultural reasons, many women are reluctant to report themselves as the head of their household. It is also possible that they do not consider themselves the household head even if their husbands have migrated to find work. These reasons may explain the low reported rates in Lao PDR.

Country	Indicator Definition	Source	Table
Cambodia	Percentage of households headed by females (1998)	Population Census 1998	PopMap
Lao PDR	Percentage of households headed by females (1995)	Population Census 1995	Table 3B1
Thailand	Percentage of households headed by females (2000)	Population Census 2000	Key Ind.
Viet Nam	N/A	N/A	N/A

Map 18: Ethnic Minority Population

Ethnic minority groups as a percentage of total population



Map 18: Ethnic Minority Population

Ethnic minority groups as a percentage of total population

This map shows the proportion of people living in each province who do not belong to the dominant ethnic group of their country. The dominant groups are the Khmer in Cambodia, the ethnic Lao in Lao PDR, the Thais in Thailand, and the Kinh in Viet Nam.

There are particularly wide variations in how ethnicity is, or is not, reported. Even if indicator definitions were identical, definitions of ethnicity would still be problematic, being subject to self-image and expedience (where self-reported), and on political considerations (where defined by governments). The map presented here should be seen in this light.

The Mekong region has a rich history of cultural and ethnic diversity. More than 70 ethnic groups make up the population, particularly in upland areas of Lao PDR, Cambodia and Viet Nam. Data for Cambodia were unavailable for the production of this map.

Ethnic minority groups account for almost 50 percent of the population of Lao PDR. The ethnic Lao are located predominantly in the lowlands of the Mekong and its tributaries. As one moves into the upland areas of the country, the diversity and proportion of ethnic minority groups increases.

Elsewhere in the Mekong basin, ethnic minority groups make up smaller proportions of the populations. They also tend to be concentrated in the remoter regions, including the Northern Region of Thailand, Northeast Cambodia and the Viet Nam Central Highlands.

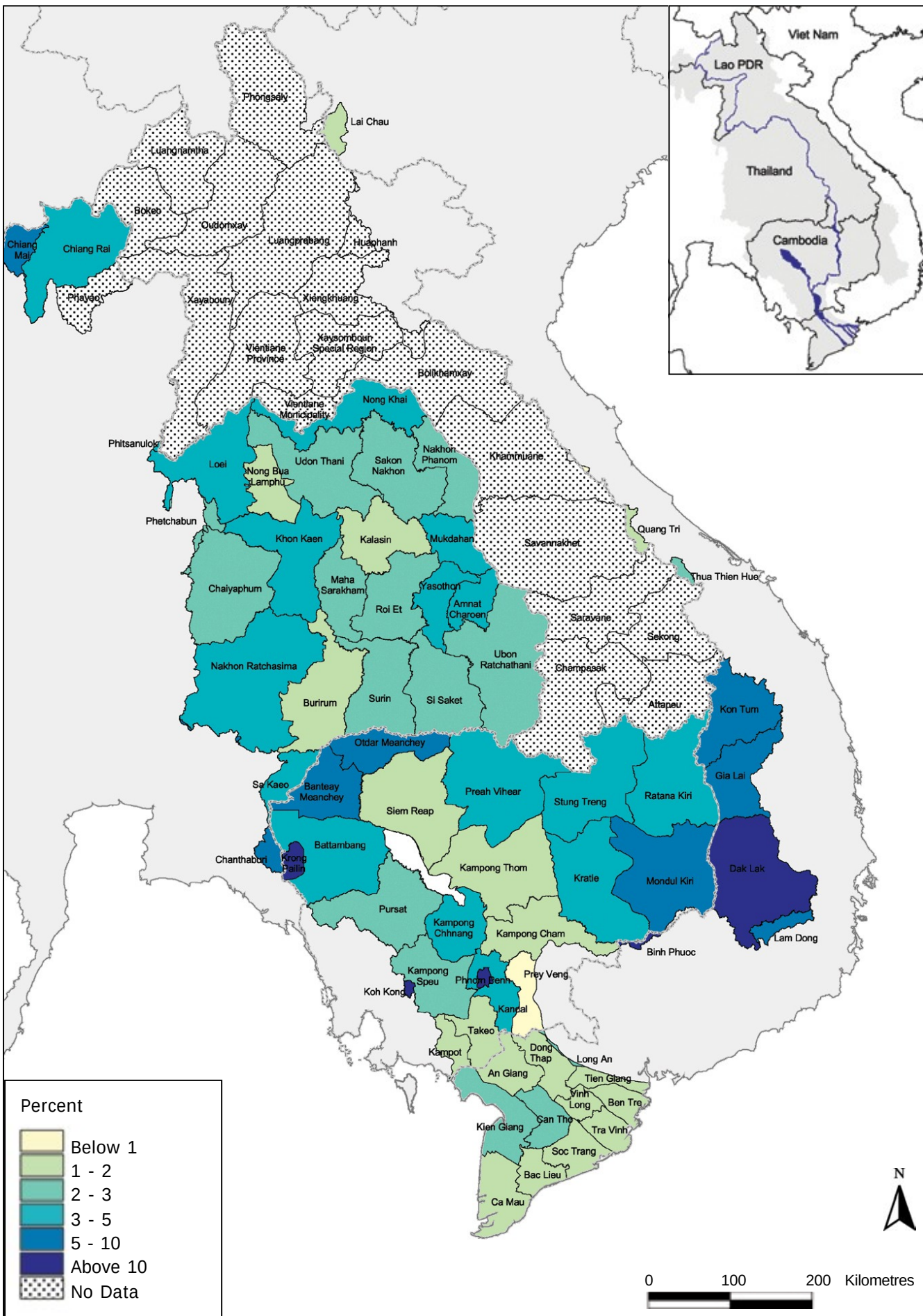
Large populations of the dominant ethnic group from each country live in other countries of the basin. Over one million ethnic Khmer live in remote parts of the Mekong Delta; they also make up 25-50 percent of the population of the Thai provinces of Si Saket, Surin and Burirum along the Cambodian border. Many Kinh from Viet Nam live in Cambodia, and many ethnic Lao have settled in Northeast Thailand.

Ethnic minority groups tend to have lower levels of social and economic well-being. In each country, there is a strong correlation between areas with large minority populations and those with poor socio-economic conditions.

Country	Indicator Definition	Source	Table
Cambodia	N/A	N/A	N/A
Lao PDR	Minority population as a percentage of total population (1999)	Lao Front for National Construction 1999	
Thailand	Minority population as a percentage of total population (2000)	Population Census 2000	Key Ind.
Viet Nam	Minority population as a percentage of total population (1999)	Population Census 1999	Table 1.6

Map 19 : Migration

Proportion of population not living in the same province as five years earlier



Map 19: Migration

Proportion of population not living in the same province as five years earlier

Migration patterns in the LMB are complex, with people moving for many reasons. This map depicts available data on the proportion of the population that had migrated to a province in the five years preceding the most recent census.

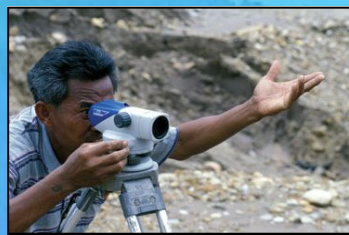
The search for employment is a major cause of migration. People migrate on a seasonal and semi-permanent basis to Phnom Penh, Vientiane and secondary urban centres to earn money for their families in rural areas. Economic migrants are often the young and better-educated people (NSO-Thailand 1998). Also, increasing numbers of women are migrating to cities to work in low-skill manufacturing and service sector jobs.

Rural-rural migration frequently involves people moving from more to less densely populated areas (such as northeast Cambodia) to seek new economic opportunities. Migration from urban to rural areas occurs in periods of economic slowdown such as the late 1990s. Due to increased urban unemployment (such as occurred in Thailand), many people returned to their rural home communities.

Government policies also influence people's movements. In Lao PDR, programs to stop shifting cultivation involved relocating people out of highland areas. In Viet Nam, moving lowland people to the Central Highlands formed part of national objectives to increase agricultural production in the region, accounting for five-year migration rates of 7 to 12 percent.

Conflict and instability in the Mekong region over the past 50 years caused many people in Cambodia, Lao PDR and Viet Nam to leave their homes. When they were able, many returned voluntarily or as part of government resettlement programs. These movements accounted for large migrations during the 1980s and early 1990s.

Country	Indicator Definition	Source	Table
Cambodia	Percentage of population who have migrated to province in the previous 5 years (1998)	Population Census 1998	Table C4
Lao PDR	N/A	N/A	N/A
Thailand	Percentage of population who migrated in last 5 years (2000)	Population Census 2000	Key Ind.
Viet Nam	Percentage of population 5 years and over living in a different province from current province of residence 5 years before (1999)	Population Census 1999	Table 2.1



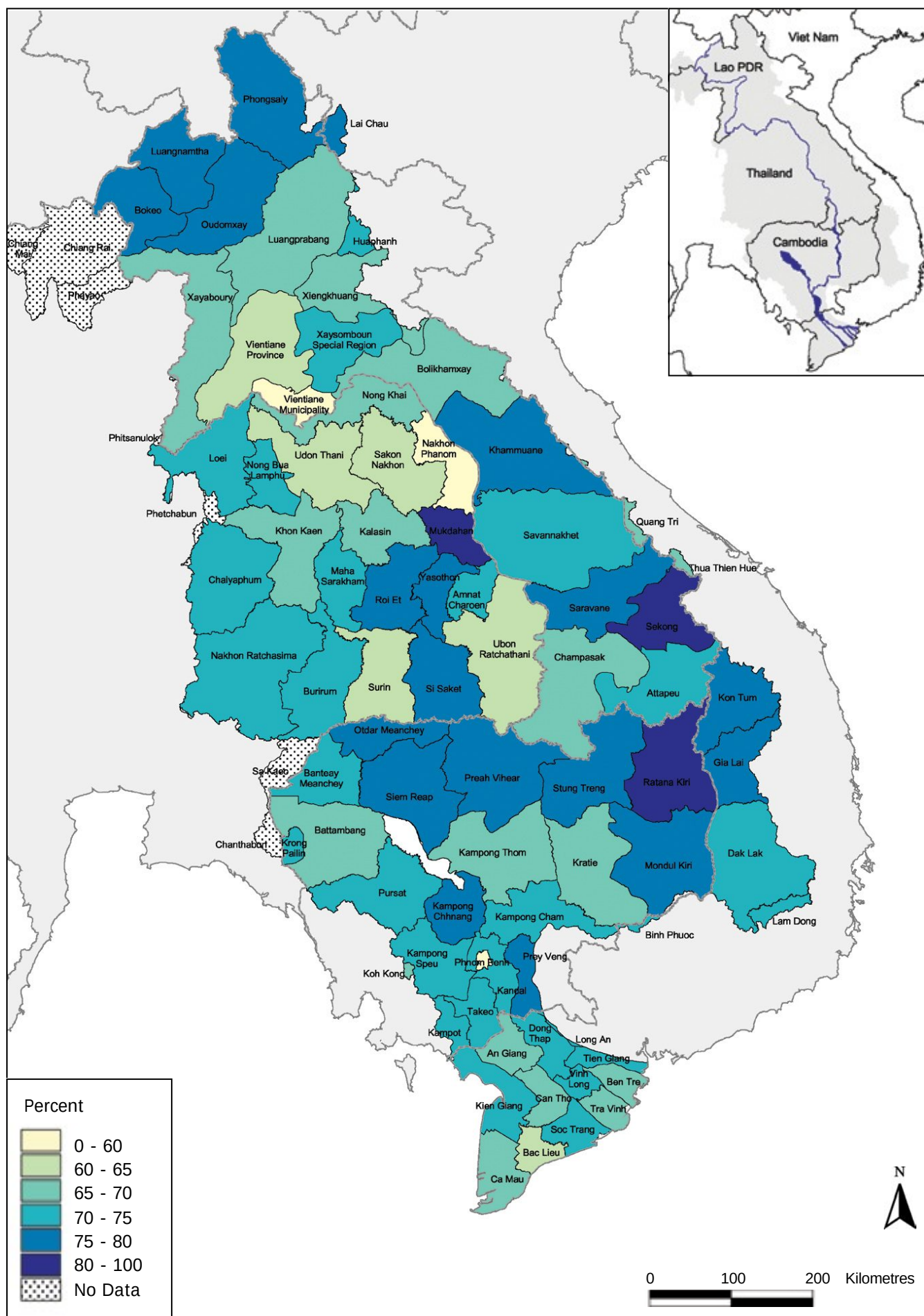
Labour Force

Labour Force Maps

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Map 20: Labour Force Participation Rate

Proportion of working age people in the labour force



Map 20: Labour Force Participation Rate

Proportion of working age people in the labour force

The labour force participation rate measures the proportion of the working age population that is employed, or unemployed but seeking work. Working age people who are not part of the labour force include students, unpaid household workers, the elderly and the infirm.

Labour force participation rates are high across the LMB. In the rural livelihood systems of the region, there is a strong economic need for everyone to work. The highest participation rates occur in the more remote parts of the basin - the upland areas of northern and southern Lao PDR and north and northeast Cambodia.

Urban labour force participation rates are lower (59 percent in Phnom Penh). Higher incomes allow for the support of dependents, and greater educational opportunities encourage people to study longer.

The indicators for the four countries are not perfectly comparable. The data for Lao PDR take the working age population to be everybody of 10 years and above, while for the other three countries the data set is limited to people 13 years and above. This means that the figures for Lao are underestimated in comparison to those for the other countries. Because the data for Lao include children aged 10-13, who are more likely to be in school than older people, the participation rates are lower than if the data included only people 13 years and over.

Country	Indicator Definition	Source	Table
Cambodia	Employed and unemployed people 13 years and over divided by total population 13 years and over (1998)	Population Census 1998	Table B1
Lao PDR	The proportion of the population 10 years and over supplying labour for the production of economic goods and services (1995)	Population Census 1995	
Thailand	Employed, unemployed, and seasonally inactive people 13 years and over divided by total population 13 years and over (1999)	Northeast Regional Statistics 2000	Table 1.11
Viet Nam	Employed and unemployed people 13 years and over as a percentage of total population 13 years and over (1999)	Population Census 1999	Table 5.3

Map 21: Female Labour Force Participation Rate

Proportion of working age females in the labour force

In general, labour force participation rates for women in the LMB are lower than for men. Nonetheless, female participation rates substantially exceed the average of 51 percent in East Asia and the Pacific (IMF 2002), except in parts of the Korat Plateau.

The highest rates (above 70 percent) occur in Lao PDR, Cambodia and the Central Highlands, in areas where most households practice subsistence agriculture. Men and women work together to cultivate rice. Women also grow vegetables and raise small livestock, process fish and other agricultural products and sell surpluses at markets. Their handicrafts are a major source of household income.

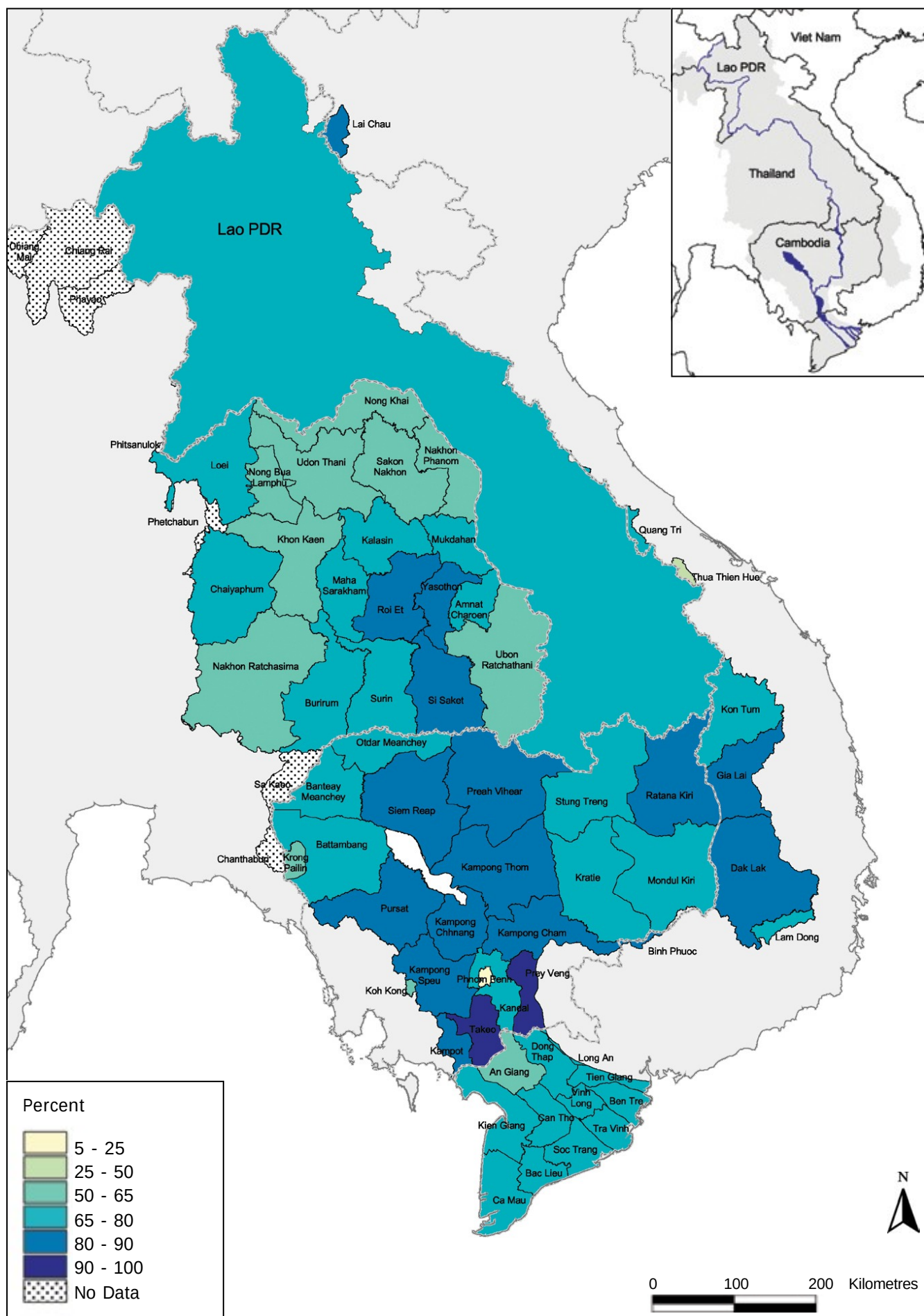
Lower female participation rates and greater differences between the rates for men and women occur in northeast Thailand (below 50 percent in some provinces) and the Mekong Delta (below 65 percent in most provinces), as well as in Phnom Penh and Pailin.

Labour force participation rates do not fully measure women's contribution to the economy. Official data are based on primary occupations and formal-sector activities that involve monetary transactions. The majority of unpaid family workers are women. Women are generally responsible for household management - collecting fuelwood and water, cleaning, cooking and caring for children, the elderly and the sick. Also, women's trading and small businesses dominate informal sector activities in the LMB (MOP-Cambodia 1998, Sihanat et al. 1997). This work is often a second occupation for women, in addition to agricultural or other activities.

Country	Indicator Definition	Source	Table
Cambodia	Employed and unemployed females 13 years and over divided by total female population 13 years and over (1998)	Population Census 1998	Table B1
Lao PDR	The proportion of females 10 years and over supplying labour for the production of economic goods and services (1995)	Population Census 1995	
Thailand	Employed, unemployed, and seasonally inactive females 13 years and over divided by total female population 13 years and over (1999)	Northeast Regional Statistics 2000	Table 1.11
Viet Nam	Employed and unemployed females 13 years and over as a percentage of female population 13 years and over (1999)	Population Census 1999	Table 5.3

Map 22: Employment in Agriculture

Proportion of employed persons working in the agriculture sector



Note: Province names and boundaries are not shown where national or regional data are used

Map 22: Employment in Agriculture

Proportion of employed persons working in the agriculture sector

The economy of the LMB has traditionally been based on agriculture. In recent years, economic growth has been more rapid in other sectors, accompanied by a relative decline in the contribution of agriculture to GDP. Nonetheless, the majority of the labour force in the basin continues to work in the agriculture sector.

Much agriculture sector employment is based around subsistence production. Such agricultural activity involves very low levels of productivity and income and is an important part of the pattern of poverty in rural areas.

In Cambodia and Lao PDR, approximately 75 to 85 percent of the labour force works in the agricultural sector. The shares of women working in agriculture generally exceed the shares of men by 5 to 30 percentage points.

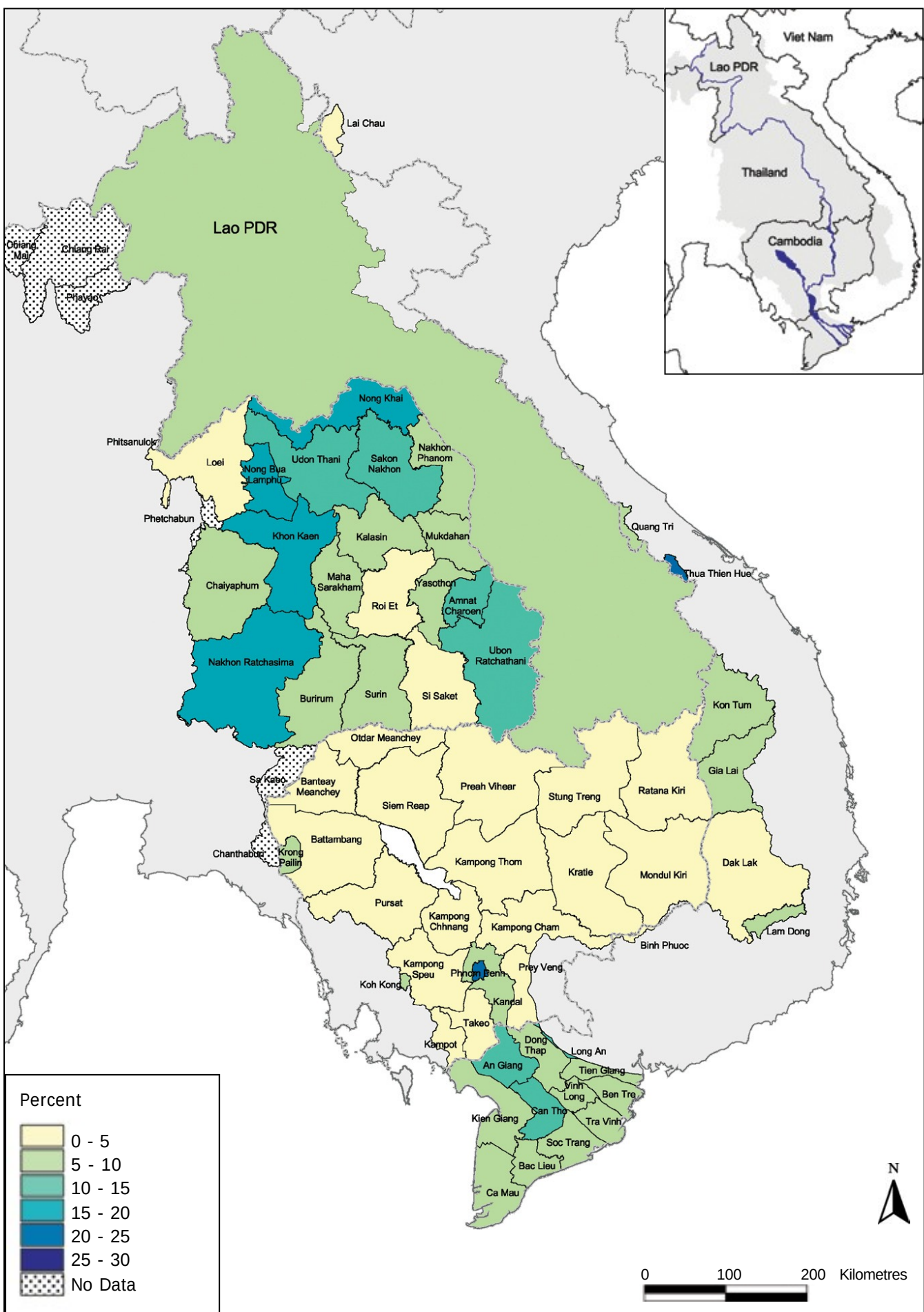
Agriculture employs two-thirds of the labour force in the Mekong Delta. The proportion is expected to decline as larger-scale commercial enterprises replace traditional agricultural activities. In the Central Highlands, a mixture of rice and cash crop farming employs slightly higher proportions of the labour force.

In Northeast Thailand, 70 percent of the labour force works in agriculture, with nearly equal shares for men and women. Lower proportions occur in provinces where transportation facilities and higher levels of urbanization create more non-farm employment opportunities.

Country	Indicator Definition	Source	Table
Cambodia	Percentage of employed persons in agriculture, fishing, hunting, and forestry (1998)	Population Census 1998	PopMap
Lao PDR	Proportion of the labour force engaged in agriculture (1997)	UNDP Lao Social Database	
Thailand	Proportion of labour force 13 years old and over employed in agriculture, forestry, hunting, and fishing (1999)	Northeast Regional Statistics 2000	Table 1.15
Viet Nam	Proportion of labour force 13 years old and over employed in agriculture, forestry, hunting, and fishing (1999)	Population Census 1999	Table 5.7

Map 23: Employment in Industry

Proportion of employed persons working in the industry sector



Note: Province names and boundaries are not shown where national or regional data are used

Map 23: Employment in Industry

Proportion of employed persons working in the industry sector

Except in Northeast Thailand and Phnom Penh, industry employs less than 10 percent of the labour force in the LMB. Although regional economic growth in recent years has been spurred by strong industrial growth, much of this activity has occurred outside the LMB. This is particularly true in Thailand and Viet Nam.

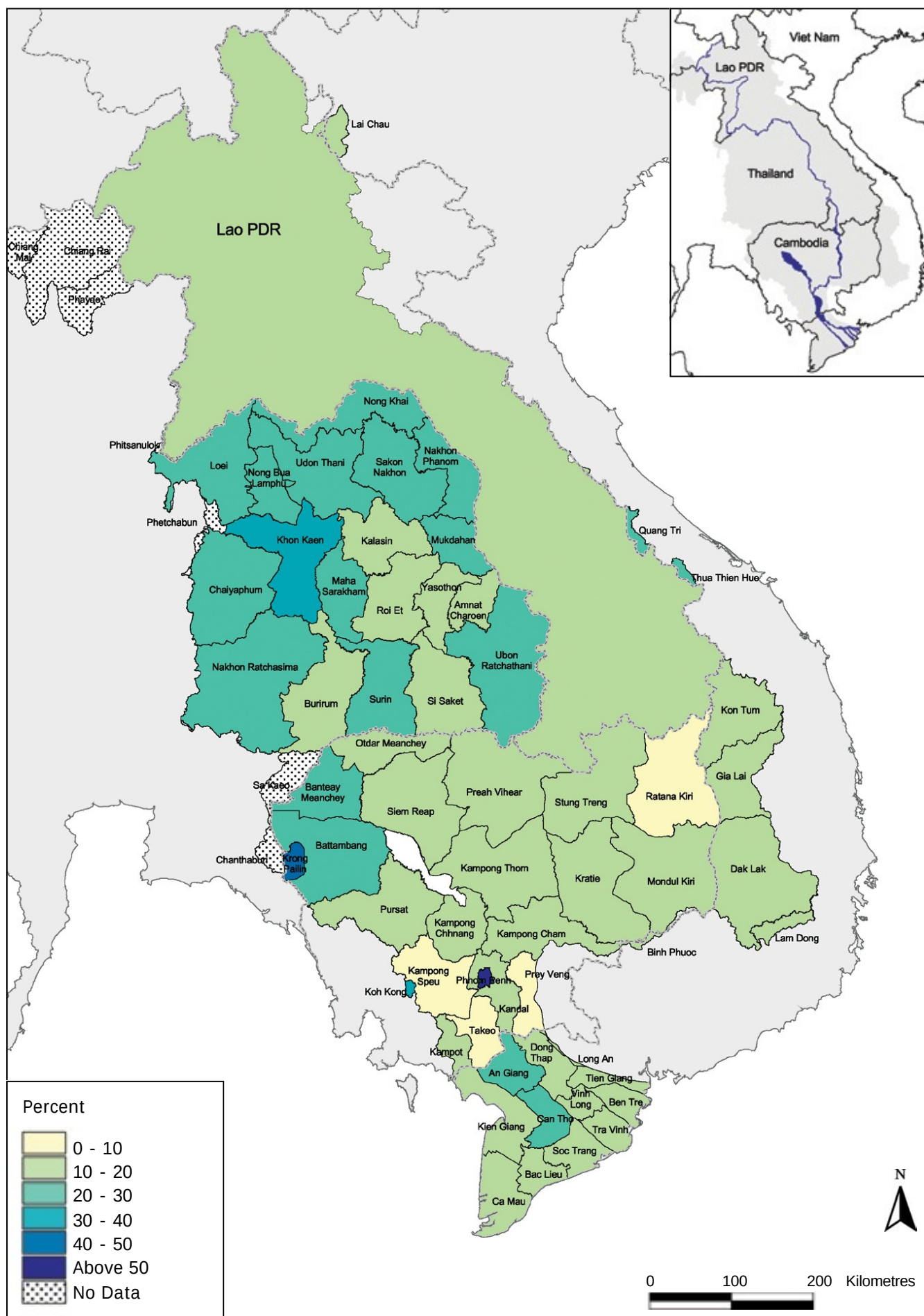
Industrial activities in the LMB consist primarily of agro-processing, production of building materials, and other rural industries. Government policies, particularly in Viet Nam, are promoting further development of rural industry to provide more employment and higher incomes for rapidly-growing labour forces.

Rapid growth of the garment industry in Cambodia and Lao PDR has centred on Phnom Penh and Vientiane. Overall, this industry is a major factor in industrial employment rates of 22 percent in Phnom Penh. In Lao PDR, over 90 percent of garment workers are young women, most of whom are recent migrants from rural communities (Chagnon 1996).

Country	Indicator Definition	Source	Table
Cambodia	Percentage of employed persons in mining, quarrying, manufacturing, construction, and utilities (1998)	Population Census 1998	PopMap
Lao PDR	Proportion of the labour force engaged in manufacturing (1997)	UNDP Lao Social Database	
Thailand	Proportion of labour force 13 years old and over employed in mining, quarrying, manufacturing, construction, and utilities (1999)	Northeast Regional Statistics 2000	Table 1.15
Viet Nam	Proportion of labour force 13 years old and over employed in mining, quarrying, manufacturing, construction, and utilities (1999)	Population Census 1999	Table 5.7

Map 24: Employment in Services

Proportion of employed persons working in the services sector



Note: Province names and boundaries are not shown where national or regional data are used

Map 24: Employment in Services

Proportion of employed persons working in the services sector

The service sector in the LMB has grown rapidly in recent decades. The sector includes a variety of businesses, from small street vendors and restaurants to supermarkets and large-scale hotels. Tourism is also becoming increasingly important, accounting for 13 percent of total GDP in Thailand in 2001.

The service sector, which also includes the public sector and domestic work, provides the most employment after agriculture. Service employment is generally concentrated in urban areas. In Phnom Penh, for example, it accounts for nearly 70 percent of total employment.

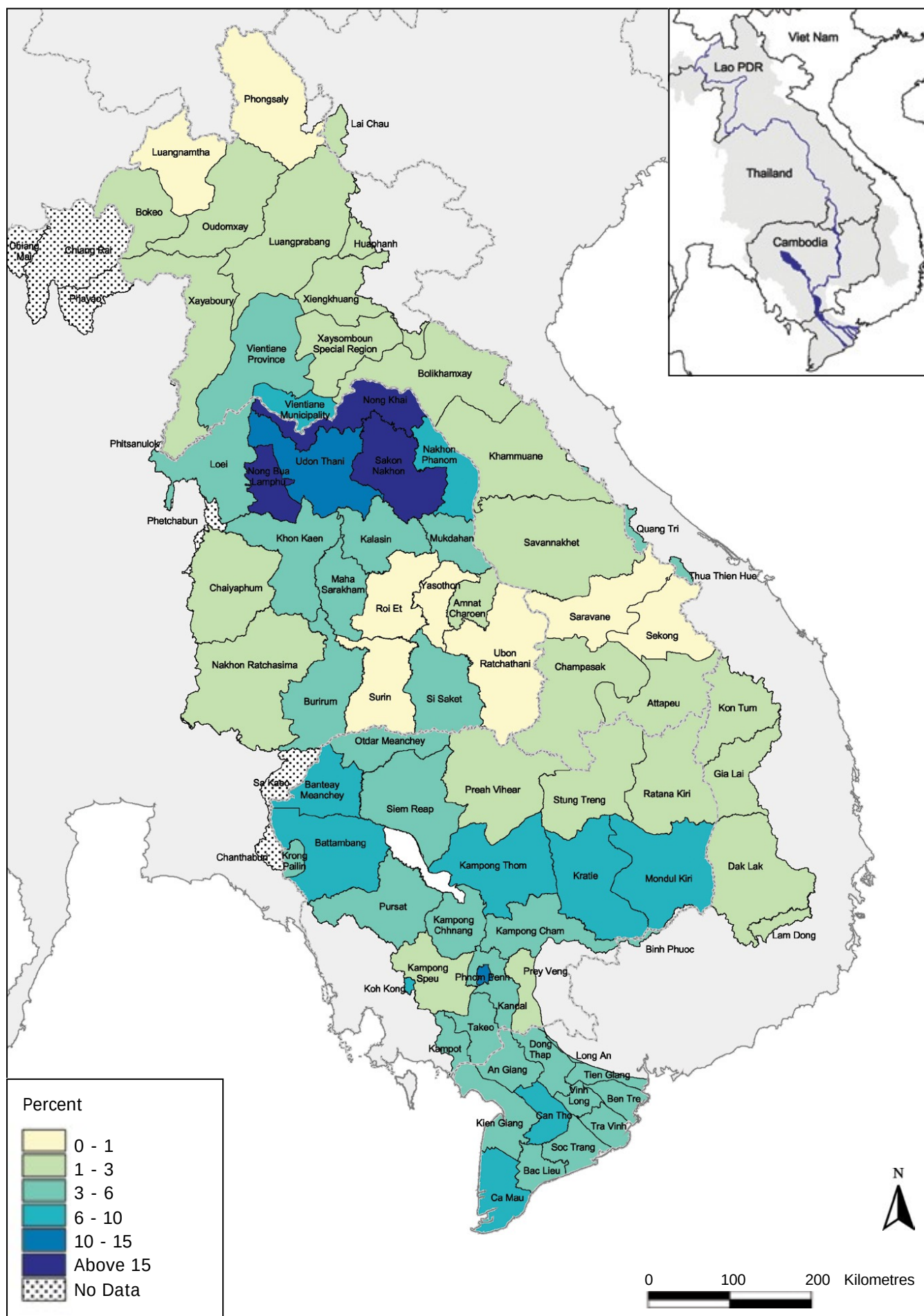
Women who migrate to cities are much more likely than men to work in the growing informal sector. Informal trading and small businesses require little skill, education or capital. Also, many formal sector companies sub-contract to home-based workers, and it is often easier for women to balance this type of work with childcare and household responsibilities.

Women make up a large part of the labour force in the service sector, particularly in urban areas. Typical service sector employment for women includes hotel and restaurant work, as well as informal trading and sales in market stalls. People working in such occupations often face low and insecure wages, long hours and poor working conditions.

Country	Indicator Definition	Source	Table
Cambodia	Percentage of employed persons in commerce, transport, communication, finance, public administration, defence, and other services (1998)	Population Census 1998	PopMap
Lao PDR	Proportion of the labour force engaged in services (1997)	UNDP Lao Social Database	
Thailand	Proportion of labour force (13+) employed in commerce, transport, communication, finance, public administration, defence, and other services (1999)	Northeast Regional Statistics 2000	Table 1.15
Viet Nam	Proportion of labour force (13+) employed in commerce, transport, communication, finance, public administration, defence, and other services (1999)	Population Census 1999	Table 5.7

Map 25: Unemployment

Proportion of labour force unemployed



Map 25: Unemployment

Proportion of labour force unemployed

Unemployment rates are generally low throughout the rural areas of the LMB. In households that practice subsistence farming, everyone works full time. In fact, many people must work at more than one job to ensure basic household needs.

In urban areas, unemployment is much higher. The unemployment rates in Phnom Penh (13 percent) and Vientiane (7 percent) are 2 to 3 times higher than in rural areas. One major cause of urban unemployment is economic reform that downsizes the public and private sectors and privatises state enterprises. Higher rates of joblessness in cities also reflect large numbers of migrants who come from rural areas with limited skills and are unable to find work.

In Northeast Thailand, several provinces have very high unemployment rates. In Nong Bua Lamphu, for example, the rate is nearly 30 percent. Following the financial crisis of 1997, unskilled workers in major centres such as Bangkok and Chiang Mai were among the first to be laid off. Many returned to their home communities to look for work, although there were often no jobs. These data from 1999 may reflect these circumstances.

Unemployment is, on average, slightly higher among women in the work force. Sometimes it is much higher, for example, 17 percent for women and 9 percent for men in Phnom Penh.

Underemployment is a serious and growing problem in the region, although reliable data are limited. Underemployed people are those who do not work during part of the year or who are consistently unable to find more than 35 hours of work per week. In the LMB, the phenomenon is more common in rural areas. In Viet Nam, for example, widespread underemployment occurs in the agricultural sector, where people work an average of 21 hours per week (World Bank 2002d).

Country	Indicator Definition	Source	Table
Cambodia	Unemployed people seeking work 13 years and over divided by employed and unemployed people seeking work 13 years and over (1998)	Population Census 1998	Table B1
Lao PDR	Unemployed people 10 years old and over as a percentage of employed and unemployed people 10 years old and over (1995)	Population Census 1995	Table 5.5
Thailand	Unemployed and seasonally inactive people 13 years and over, as a percentage of total labour force 13 years and over (1999)	Northeast Regional Statistics 2000	Table 1.11
Viet Nam	Unemployed persons 13 years and over as a percentage of employed and unemployed persons 13 years and over (1999)	Population Census 1999	Table 5.3



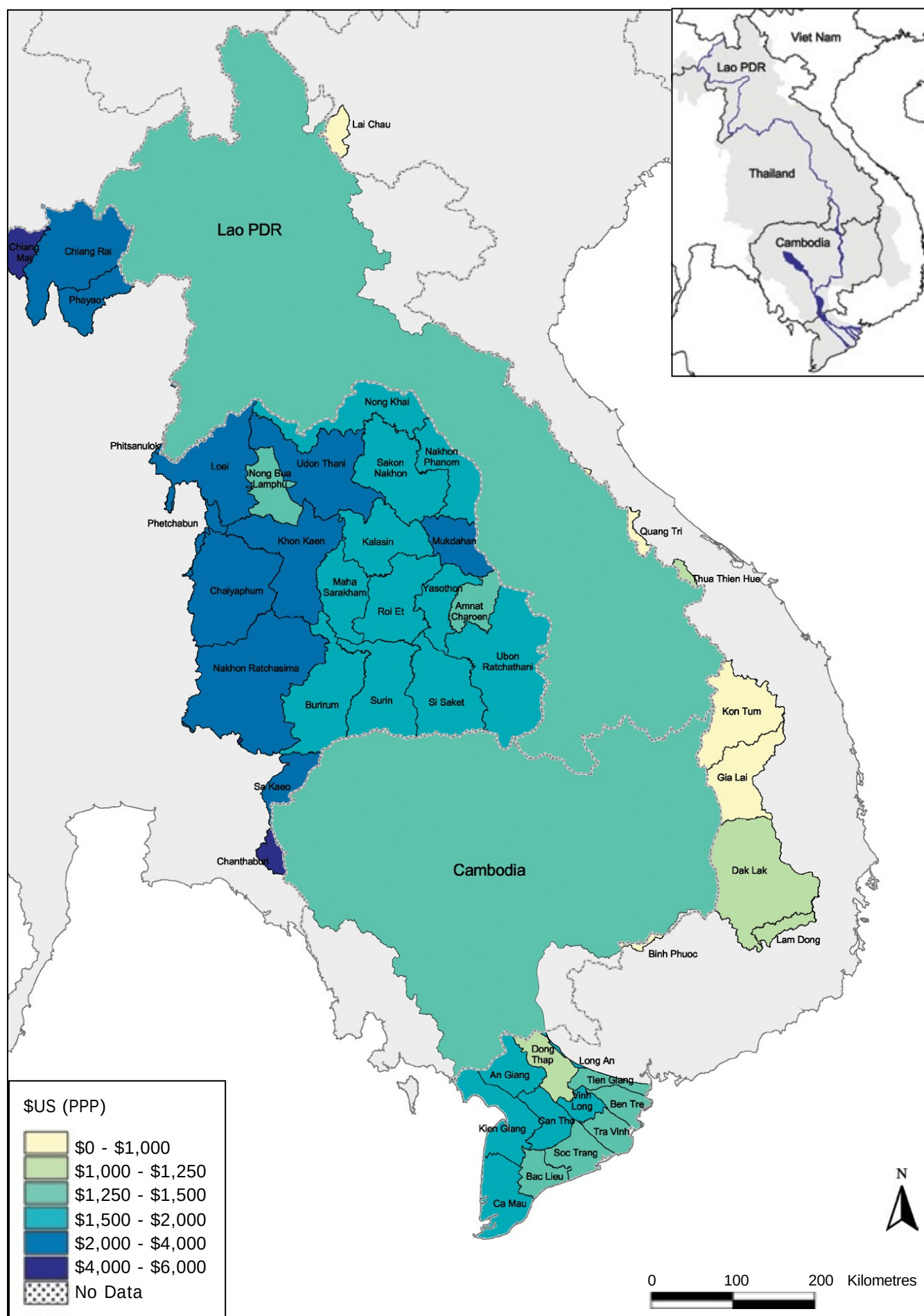
Living Standards

Living Standards Maps

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Map 26: Income - GDP Per Capita (\$PPP)

Gross domestic product per person (Purchasing Power Parity)



Note: Province names and boundaries are not shown where national or regional data are used

Map 26: Income - GDP Per Capita (\$PPP)

Gross domestic product per person (Purchasing Power Parity)

GDP per capita represents the total value of a province or country's economic production, divided by the population. This figure is used as an estimate of average income. Stating GDP per capita in terms of purchasing power parity involves adjusting the data by the local cost of living to arrive at a figure that is internationally comparable. If two countries have per capita GDP incomes that are the same in \$PPP, this means that the average income in each country could buy approximately the same amount of goods and services at local prices, even if the absolute values of the average incomes were different.

Income based on per capita GDP (\$PPP) may understate actual living standards in the LMB. Large numbers of people farm primarily for household consumption or work in the informal sector, and are not part of the market economies of their countries.

Comparison of per capita GDP (\$PPP) shows that incomes vary widely across the LMB. At the national level, per capita PPP income in Thailand in 1999 was around \$6,000, compared with \$1,860 in Viet Nam, \$1,471 for Lao PDR and \$1,361 for Cambodia (UNDP 2002). Provincial-level data are not available for Cambodia and Lao PDR, but in Thailand and Viet Nam it is clear that people living in provinces in the LMB often have income levels well below the national averages.

Most people in the LMB earn income in the agricultural sector. At the same time, income from non-farm activities (self-employment and salaried jobs) is increasing. Remittances are also an important source of income for many rural households.

In Northeast Thailand, farmers in the more rural eastern provinces tend to have lower income levels. In the western provinces of the Korat Plateau and in the North Region, particularly in highly urbanised Chiang Mai, there is a greater mixture of farm and non-farm economic activities. The latter tend to provide people with higher incomes.

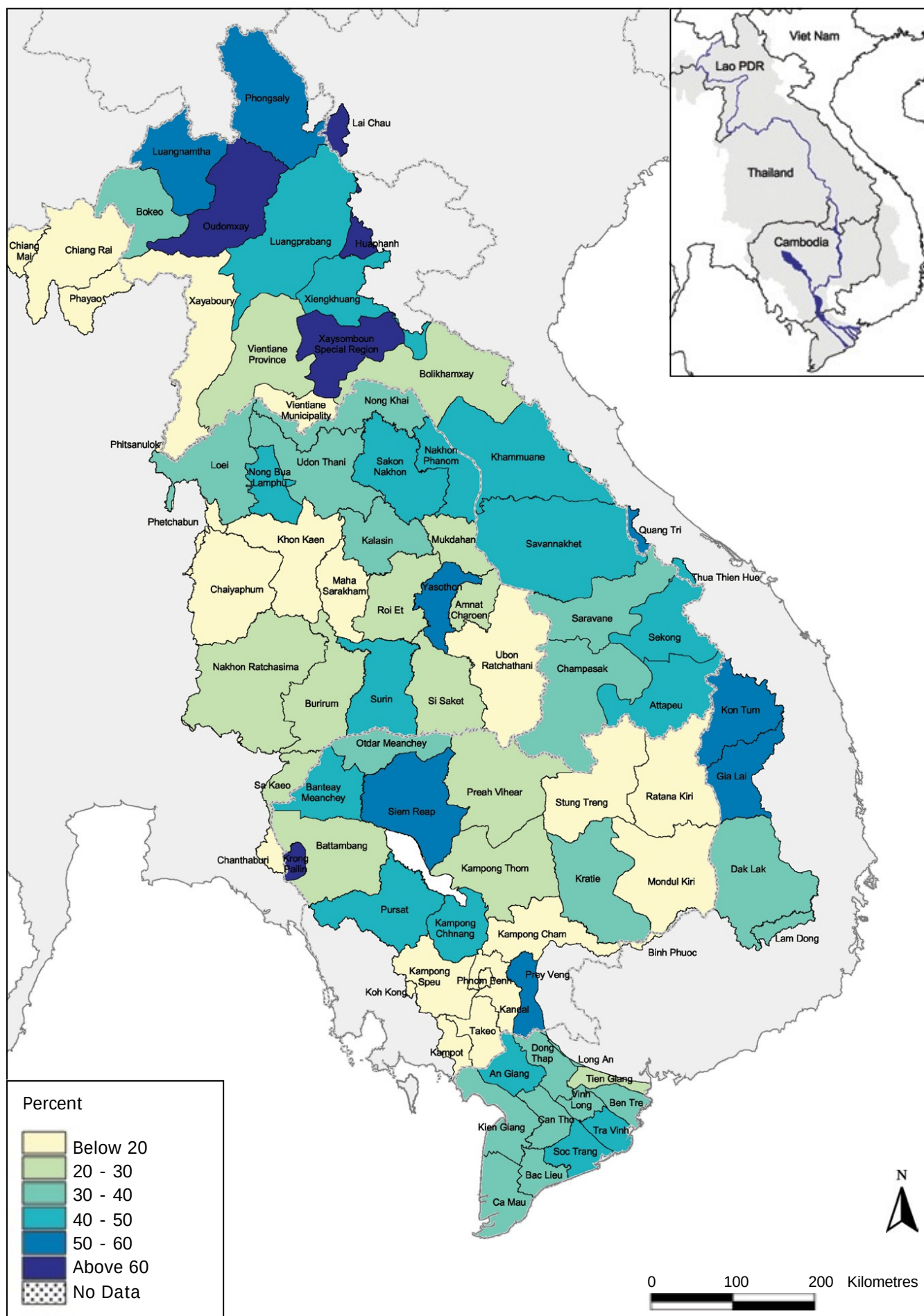
In Viet Nam, income levels in much of the Mekong Delta approach the national average. This reflects the productivity of rice cultivation in the region, and contrasts with much lower incomes in the Central Highlands. In the eastern provinces of the Delta, however, high population densities tend to result in lower per capita GDP.

Women have significantly lower income levels than men. In Cambodia, Lao PDR and Thailand, non-agricultural wage levels for women are 75 to 80 percent of the levels for men (MOP-Cambodia 1998, Chagnon 1996, UNDP-Thailand 1999). In Viet Nam, women's overall wages are 72 percent of men's and, in the agricultural sector, 62 percent of men's (AusAID 2002).

Country	Indicator Definition	Source	Table
Cambodia	GDP per capita PPP (1999)	UNDP Human Development Report	Table 11
Lao PDR	GDP per capita PPP (1999)	UNDP Human Development Report	Table 11
Thailand	GDP per capita at current market prices (1999). PPP at 2000 conversion rate of 12.6	Statistical Yearbook 2001	Table 10.10
Viet Nam	GDP \$PPP per capita (1999). PPP at 1999 conversion rate of 2745	Viet Nam Human Development Report 2001	Table 1

Map 27: Poverty Rate

Proportion of people living below the consumption-based poverty line



Map 27: Poverty Rate

Proportion of people living below the consumption-based poverty line

Poverty is measured in terms of people's consumption levels for food and basic necessities. In each country a poverty line has been defined that represents the minimum value of goods and services consumed on a daily basis to adequately sustain an average adult. People whose daily consumption has a value less than this level are considered poor. The estimation of consumption and the construction of poverty lines is complex, and the methodology employed varies between countries, particularly with regard to the inclusion of non-food items. Comparisons between countries should be made with caution. The reader is referred to the source documents for a complete explanation of the methods used for each country.

Aside from consumption, other important dimensions of poverty include lack of access to productive land and insecure land tenure; insufficient and poor quality agricultural inputs; lack of rural credit; and, poor access to transportation, markets, schools and health services.

Poverty is endemic across the LMB. In many provinces, more than 40 percent of the population lives below the poverty line. In northern Lao PDR, poverty levels in some provinces exceed 60 percent. In general, poverty levels are very high and deeply entrenched in remote, upland rural areas where ethnic minority groups live.

Strong economic growth in the 1990s led to substantial reductions in poverty levels at the national levels, in Lao PDR (from 45 to 39 percent) and Viet Nam (from 58 to 37 percent). Economic growth did not yield similar reductions in Cambodia, however, where levels only declined from 39 to 36 percent. The financial crisis in the late 1990s led to an increase from 11 to 15 percent in Thailand.

Within Thailand, the North and Northeast regions account for nearly 75 percent of national poverty (World Bank 2001). While the North and some provinces in the Northeast have levels below 20 percent (similar to national levels), other provinces have rates up to 50 percent of the population. The poorest regions of Cambodia, Lao PDR and Viet Nam are, respectively, the Tonle Sap region, the North region, and the Central Highlands.

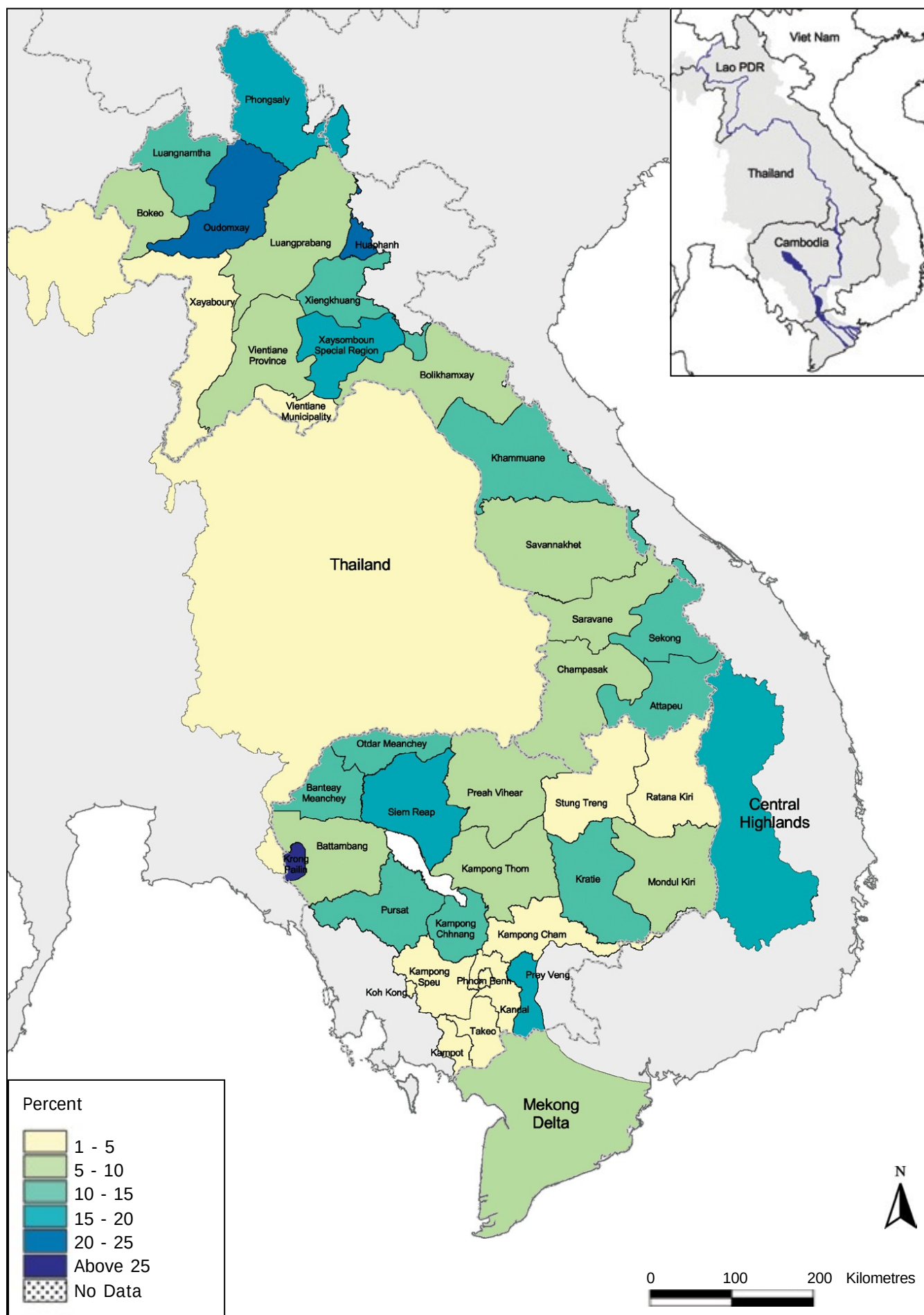
Country	Indicator Definition	Source	Table
Cambodia	Percentage of people living below consumption-based poverty line (1997) See source for details.	MOP/WFP Poverty Estimates 2002	Table 7
Lao PDR	Percentage of people living below consumption-based poverty line (1997/98) See source for details.	Kakwani et al 2002	Table 9
Thailand	Percentage of people living below consumption-based poverty line (2000) See source for details.*	NESDB 2002	
Viet Nam	Percentage of people living below consumption-based poverty line (1998/99) See source for details.**	Minot and Baulch	Table 6

* Sample size is quite small for some provinces so caution should be used in interpretation

** Poverty Rates calculated by the Ministry of Labour, Invalids, and Social Affairs of Viet Nam are not used because they are based on income, not consumption.

Map 28: Poverty Gap

Average distance below the poverty line, as a percentage of the poverty line



Note: Province names and boundaries are not shown where national or regional data are used

Map 28: Poverty Gap

Average distance below the poverty line, as a percentage of the poverty line

The poverty gap measures the depth of poverty, that is the average distance poor people are living below the poverty line, expressed as a percentage of the poverty line.

In much of the LMB, the poverty gap is less than 10 percent. The majority of the poor are clustered near the poverty line. Economic growth and policy changes can readily contribute to raising the incomes of the poor above the poverty line. At the same time, many households have consumption levels just above the poverty line. They can easily fall into poverty due economic slowdowns, floods, droughts and other adverse changes.

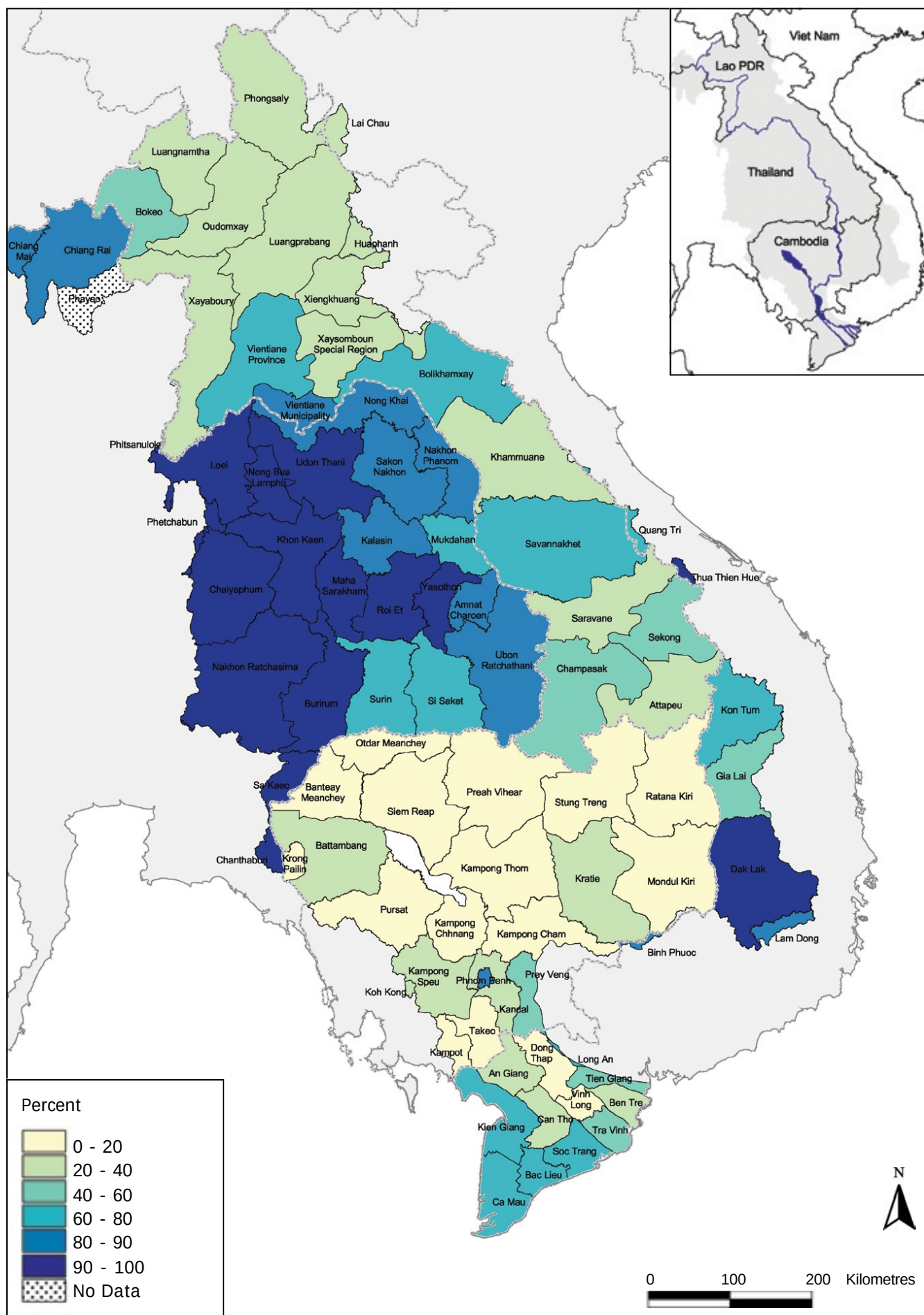
The poverty gap is larger in areas where poverty levels are higher (see Map 27). That is, in the Tonle Sap region, the Northern Region of Lao PDR and the Central Highlands, poverty is greater and more deeply entrenched. Government policies in Cambodia, Lao PDR and Viet Nam are targeting these areas for special attention because economic growth alone may not be sufficient to reduce poverty levels.

Although poverty has declined throughout much of the LMB, there is increasing inequality in the distribution of income between the rich and the poor, and between urban and rural areas. In Thailand, the incomes of the richest 20 percent of the population are 9 times greater than those of the poorest 20 percent. In other LMB countries, the richest 20 percent have incomes 4 to 6 times greater than the poorest (ADB 2002). In Viet Nam, 96 percent of the increase in inequality is due to a widening gap between urban and rural incomes (ADB 2000). The substantial declines in poverty levels in Viet Nam have been due to economic growth in urban areas, not to a more equitable distribution of wealth.

Country	Indicator Definition	Source	Table
Cambodia	Average distance people are living below the poverty line, as a percentage of the poverty line (1997)	MOP/WFP Poverty Estimates 2002	Table 7
Lao PDR	Mean distance below the poverty line as a proportion of the poverty line (1997/98)	Kakwani et al 2002	Table 10
Thailand	Poverty gap (1999)	Thailand Social Monitor	
Viet Nam	Average distance people are living below the poverty line, as a percentage of the poverty line (1998)	Viet Nam: Attacking Poverty	Table 1.4

Map 29: Access to Safe Water

Proportion of population with access to safe water



Map 29: Access to Safe Water

Proportion of population with access to safe water

The quality of water supply varies widely across the LMB. In most provinces in Northeast Thailand, over 90 percent of the population has access to safe water. In the majority of Cambodian provinces, the proportion is less than 25 percent; in Lao PDR, it is between 25 and 50 percent.

Access to safe water may be more common in Lao PDR than in Cambodia because of greater numbers of people living in remote upland areas with access to unpolluted mountain streams. Also, during the dry season in Cambodia, the number of households with access to safe water declines in both urban and rural areas.

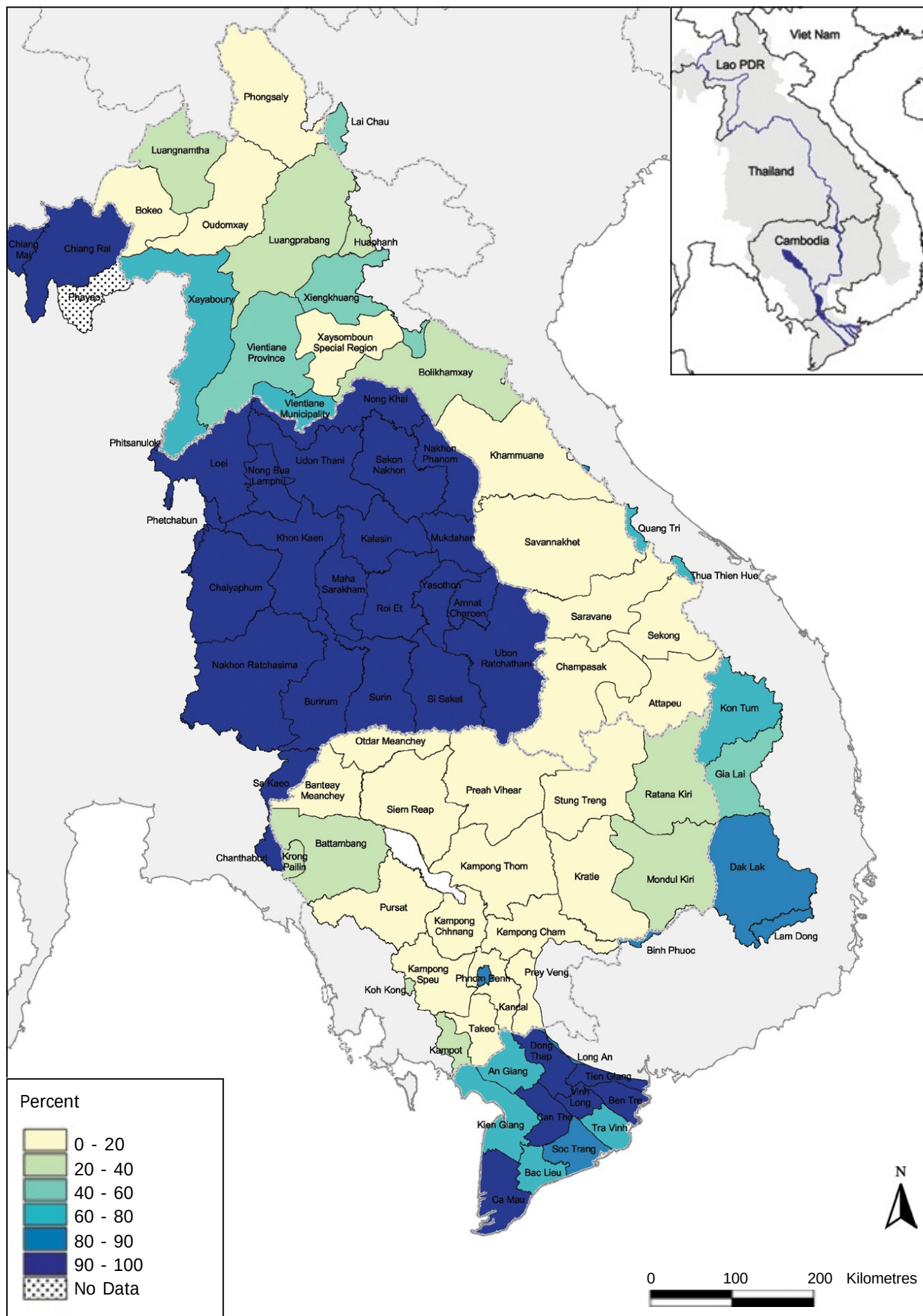
The Mekong Delta, in Viet Nam, has many households that lack access to safe water. Throughout the delta, people rely on shallow wells and irrigation canals (often contaminated by pollutants or salt-water intrusion), streams and rainwater collection. In the northern part of the delta, acid-sulphate soils often contaminate ground and surface water.

In urban areas, piped water systems increase the availability of safe water. Access to safe water is much more common in Phnom Penh and Vientiane Municipality than in other areas of Cambodia and Lao PDR. Water supplies are also improving in secondary urban centres as a result of government and donor investments.

Country	Indicator Definition	Source	Table
Cambodia	Percentage of households with access to either piped, tube well, pipe well, or bought drinking water (1998)	Population Census 1998	PopMap
Lao PDR	Percentage of population with piped water or protected well (1997/98)	Expenditure and Consumption Survey 1997/98	Table 16
Thailand	Percentage of households with access to bottled drinking water, tap water, rain water or private well (2000)	Population Census 2000	Key Ind.
Viet Nam	Percentage with access to safe water (1999)	Viet Nam Human Development Report 2001	Table 2

Map 30: Access to Sanitation

Proportion of population with access to sanitation



Map 30: Access to Sanitation

Proportion of population with access to sanitation

Access to adequate sanitation has a greater influence on health and longevity than safe water supply, and as such is an important indicator of socio-economic development. In general, adequate sanitation usually refers to the availability of a latrine in or near the house, or a flush toilet. However, definitions vary between countries, as shown in the table below.

Levels of access to sanitation vary greatly across the basin. The vast majority of households in Thailand and large parts of the Mekong Delta have access to adequate sanitation. In southern Lao and almost all of Cambodia, less than 20 percent of the population have access to such facilities.

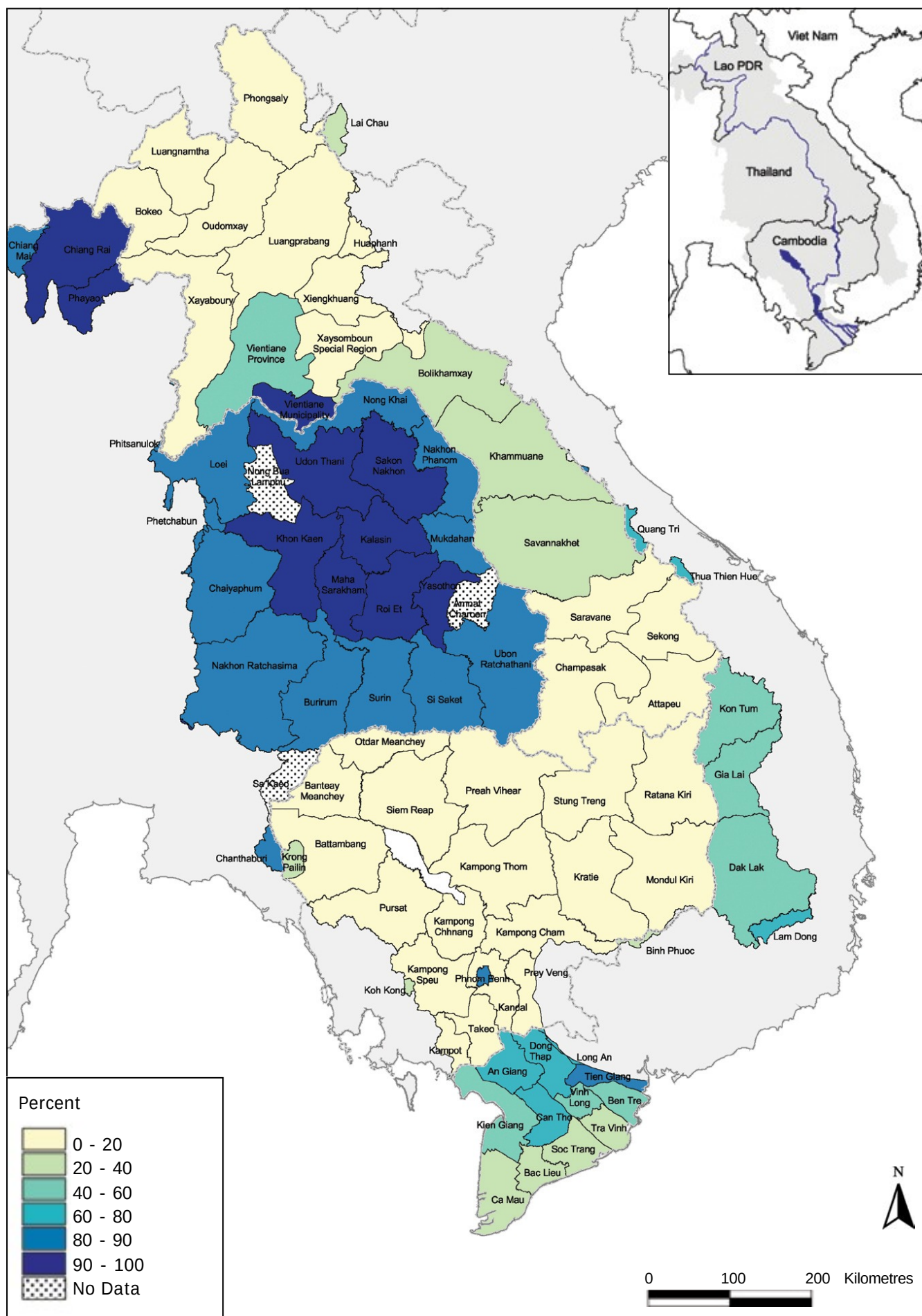
As with other public amenities, access to sanitation is much greater in the cities than in rural areas. The rate for Phnom Penh is 88 percent and for Vientiane Municipality is 70 percent. In many secondary urban centres, donors and governments are increasingly investing in the construction of sewer systems and wastewater treatment plants.

Country	Indicator Definition	Source	Table
Cambodia	Percentage of people with flush toilets, latrines, and traditional pit latrines, with or without connection to sewer/septic tank (2000)*	Health Survey 2000	Table 14
Lao PDR	Percentage of population with access to toilet of any kind (1995)	Population Census 1995	Table 8.6
Thailand	Percentage of households with flush latrines and moulded bucket latrines (2000)	Population Census 2000	Key Ind.
Viet Nam	Percentage with access to sanitation (1999)	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.

Map 31: Access to Electricity

Proportion of population with access to electricity



Map 31: Access to Electricity

Proportion of population with access to electricity

Electricity is available in most parts of Thailand, including more than 80 percent of households in provinces in the Thai portion of the LMB. In the provinces of the central Korat Plateau, more than 90 percent of households have electricity, which may be due to the proximity of hydro-power and thermal generating plants.

Across the whole of Viet Nam, more than 75 percent of households have electricity, although the rate in rural areas is significantly lower. Access in the Mekong Delta is below the national average and is lowest in the southern provinces.

In Cambodia and Lao PDR, most households do not yet have access to public electricity service. Access rates are below 10 percent in central Cambodia and the province of Mondul Kiri, as well as northern Lao PDR and the provinces of Sekong and Xaysomboun Special Region. Access to electricity is highest in the municipal areas of Phnom Penh and Vientiane.

Rural households without public electricity service often use generators to produce electricity for lighting and batteries to operate radios and TVs. Provincial and district towns that are not connected to national grids are often supplied by local authorities that operate diesel generators for three to four hours a day.

In central Lao PDR, World Bank rural electrification programmes have increased access to electricity in Vientiane Province and several provinces. The ADB is funding a programme for rural electrification in six northern provinces. In Cambodia, both donors are involved in funding rural electrification programmes.

The data for Lao PDR overestimate the proportion of households with access to electricity. They report the percentage of villages with electricity supply, although there may be households in these villages that do not have access to this service.

Country	Indicator Definition	Source	Table
Cambodia	Percentage of households that have city power, generators, or both as the main source of light (1998)	Population Census 1998	PopMap
Lao PDR	Percentage of villages with electricity (1997/98)	Expenditure and Consumption Survey 1997/98	Table 22
Thailand	Percentage of households with access to electricity (1990)	Population Census 1990	Table 10
Viet Nam	Percentage with access to electricity (1999)	Viet Nam Human Development Report 2001	Table 14



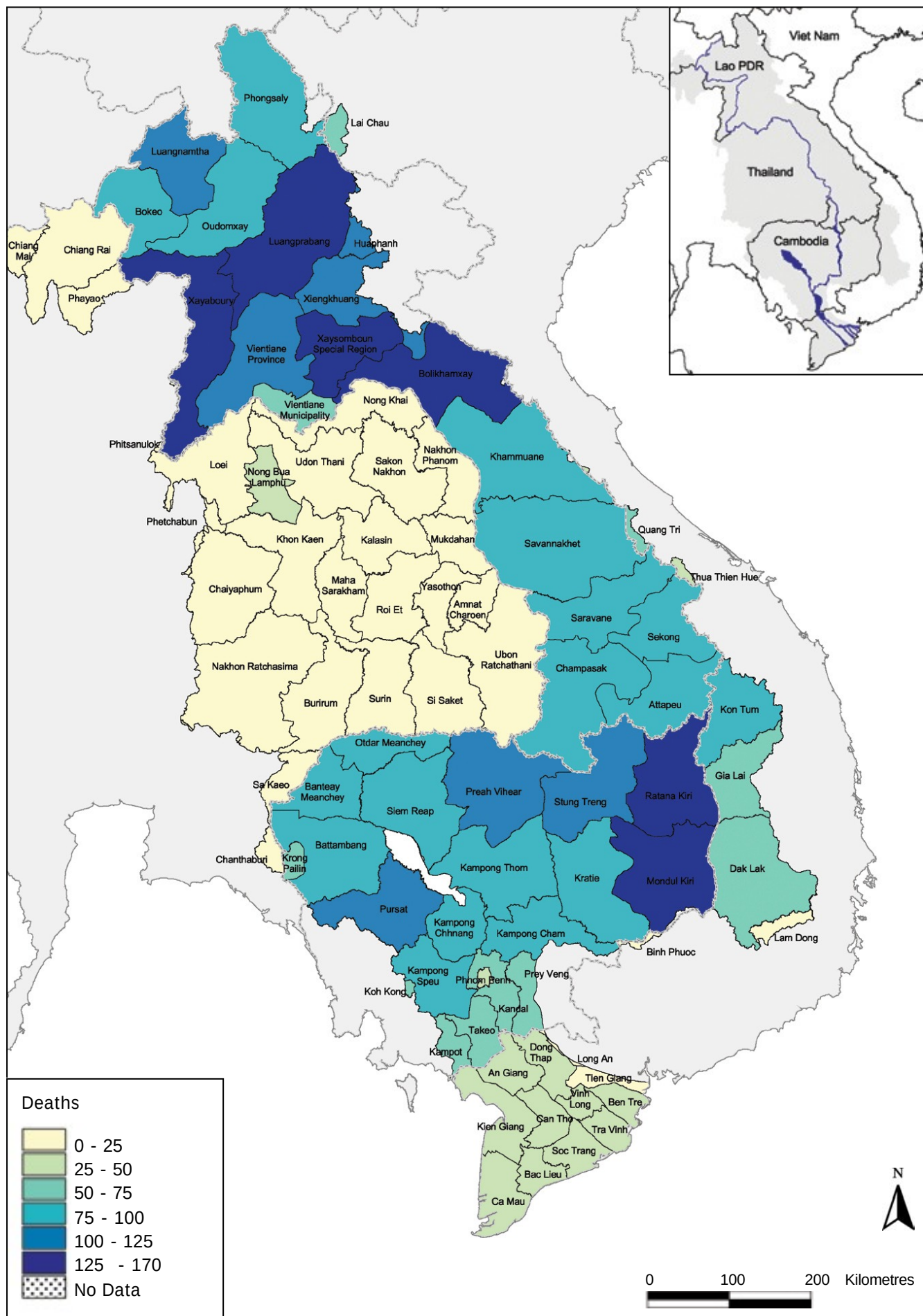
Health

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Map 32: Infant Mortality Rate

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).

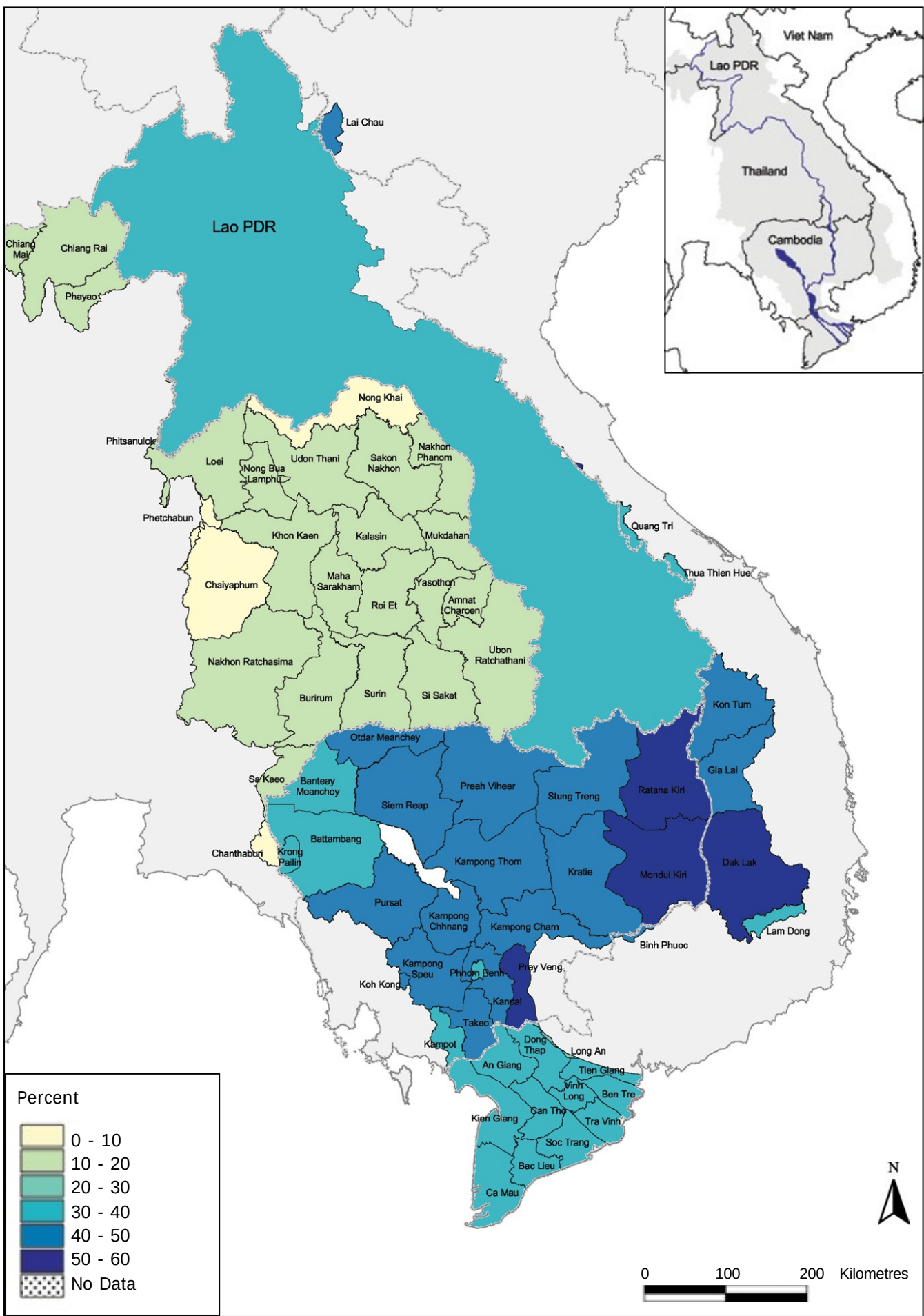
The factors influencing these rates include low birth weights; diseases such as diarrhoea, dysentery and malaria; and poor access to adequate health services. Infant mortality rates are substantially higher in remote, rural areas than in urban areas.

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	PopMap
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

Map 33: Child Malnutrition

Proportion of children underweight for age



Note: Province names and boundaries are not shown where national or regional data are used

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.

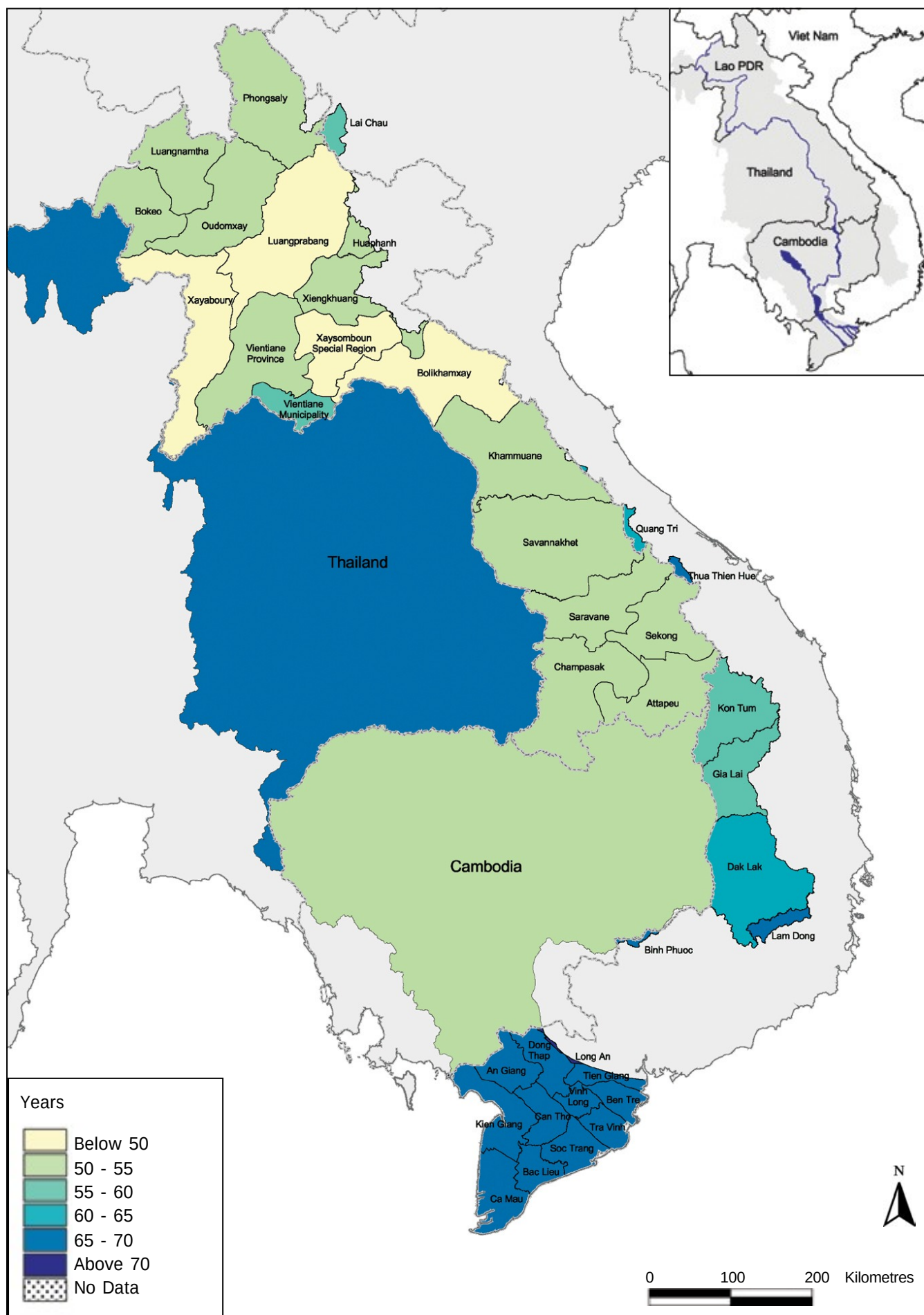
Child malnutrition is closely related to high levels of poverty. Declines in child malnutrition often follow reductions in poverty. In Viet Nam, for example, child malnutrition rates decreased from 45 percent in 1994 to 33 percent in 2000. During this same period, the national poverty rate declined approximately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

Map 34: Male Life Expectancy

Expected length of life for males



Map 34: Male Life Expectancy

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.

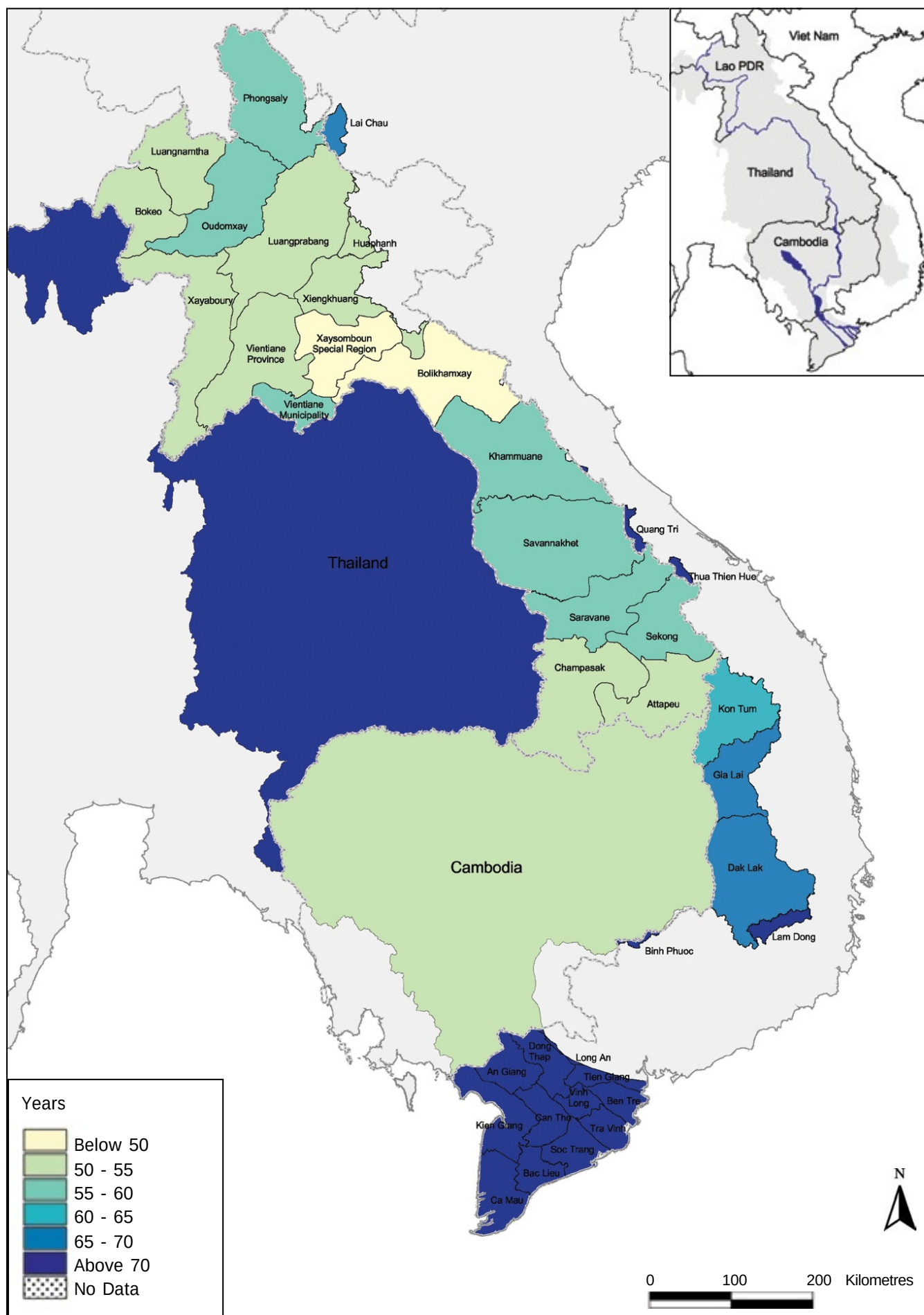
Men in cities tend to live longer than men in rural areas. For example, male life expectancy in Vientiane Municipality is 57 years, compared with 47 years in a very remote province such as Xaysomboun Special Region.

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

Map 35: Female Life Expectancy

Expected length of life for females



Note: Province names and boundaries are not shown where national or regional data are used

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.

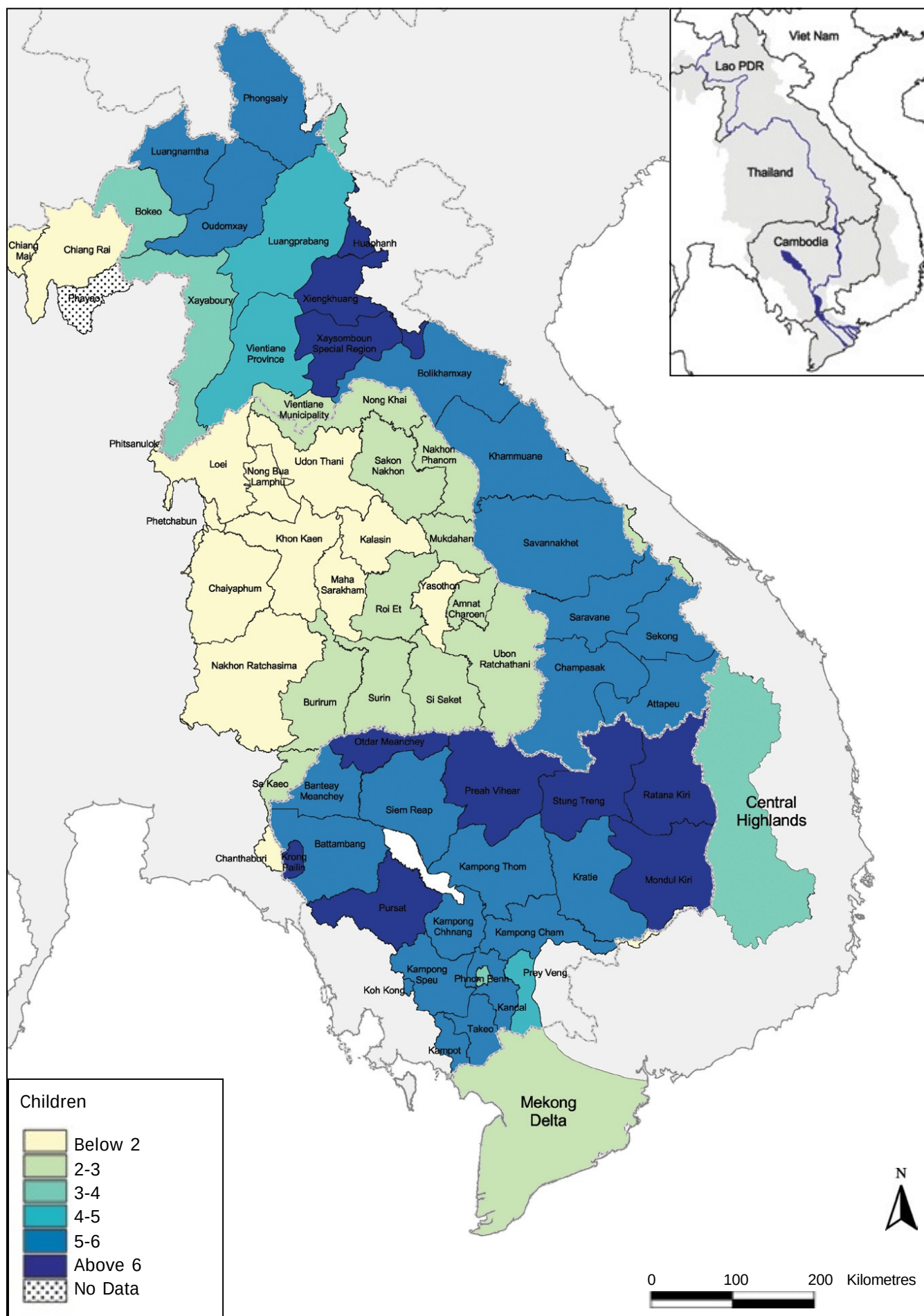
Despite differences between the sexes, variations between female lifespans across the basin generally mirror those for men. As with males, female life expectancies are lowest (around 50 years) in the provinces of Xaysomboun Special Region and Bolikhamxay in Lao PDR. They are also generally low (55 or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

Map 36: Total Fertility Rate

Average number of children a woman bears in her lifetime



Note: Province names and boundaries are not shown where national or regional data are used

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.

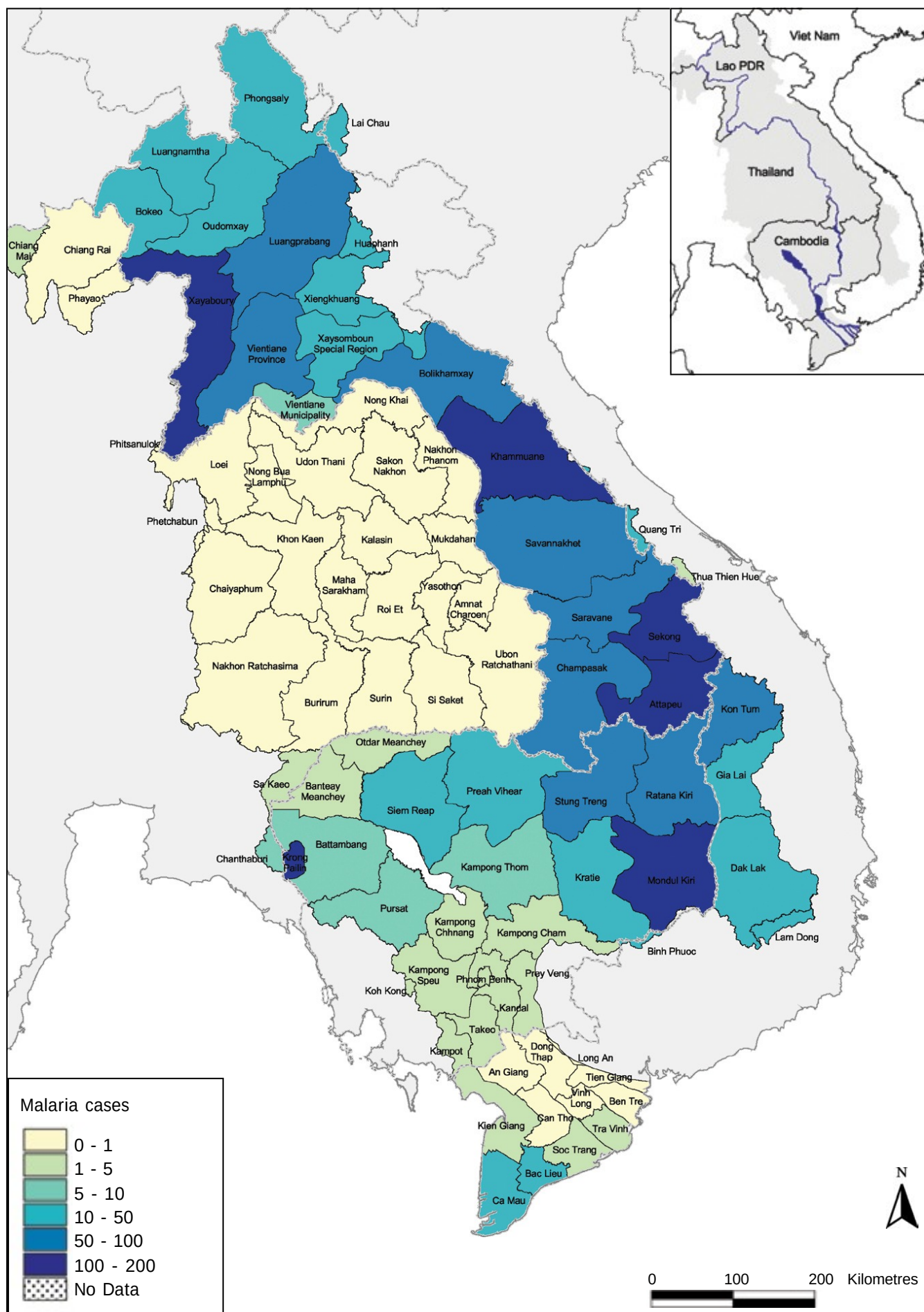
In Thailand and Viet Nam, fertility rates have dropped significantly in recent years due to successful government birth spacing programmes, better reproductive health services and higher education levels among women. As a result, the fertility rates in these portions of the LMB are below or near the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

Map 37: Incidence of Malaria

Malaria cases per 1,000 people per year



Map 37: Incidence of Malaria

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.

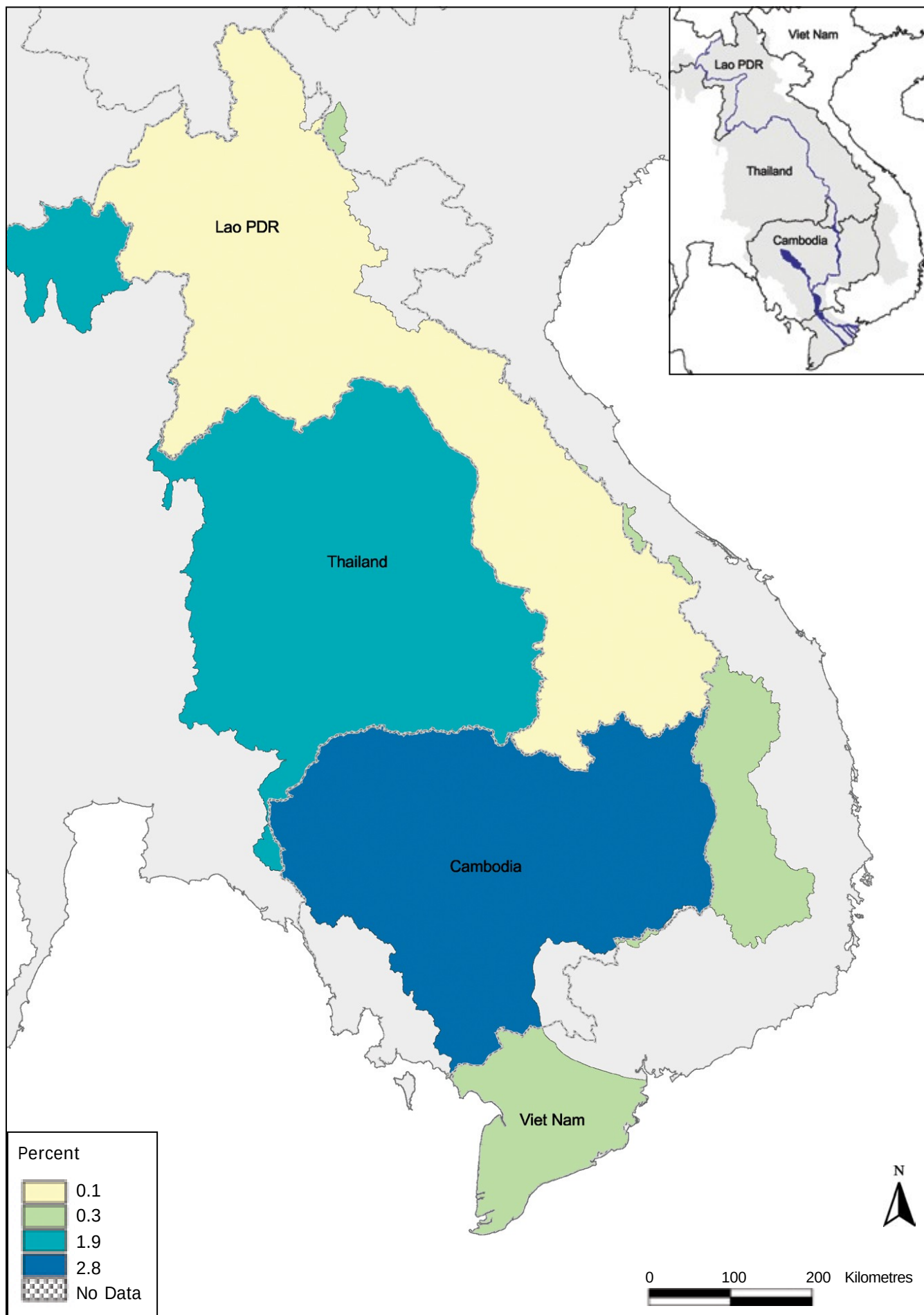
In remote areas of the Mekong Delta and the Central Highlands, as well as the northern regions of Cambodia and Lao PDR, up to 5 percent of the population contracts malaria each year. Incidences are considerably higher in many provinces of Lao PDR where above 10 percent of the population is infected with 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.

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



Note: Province names and boundaries are not shown where national or regional data are used

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



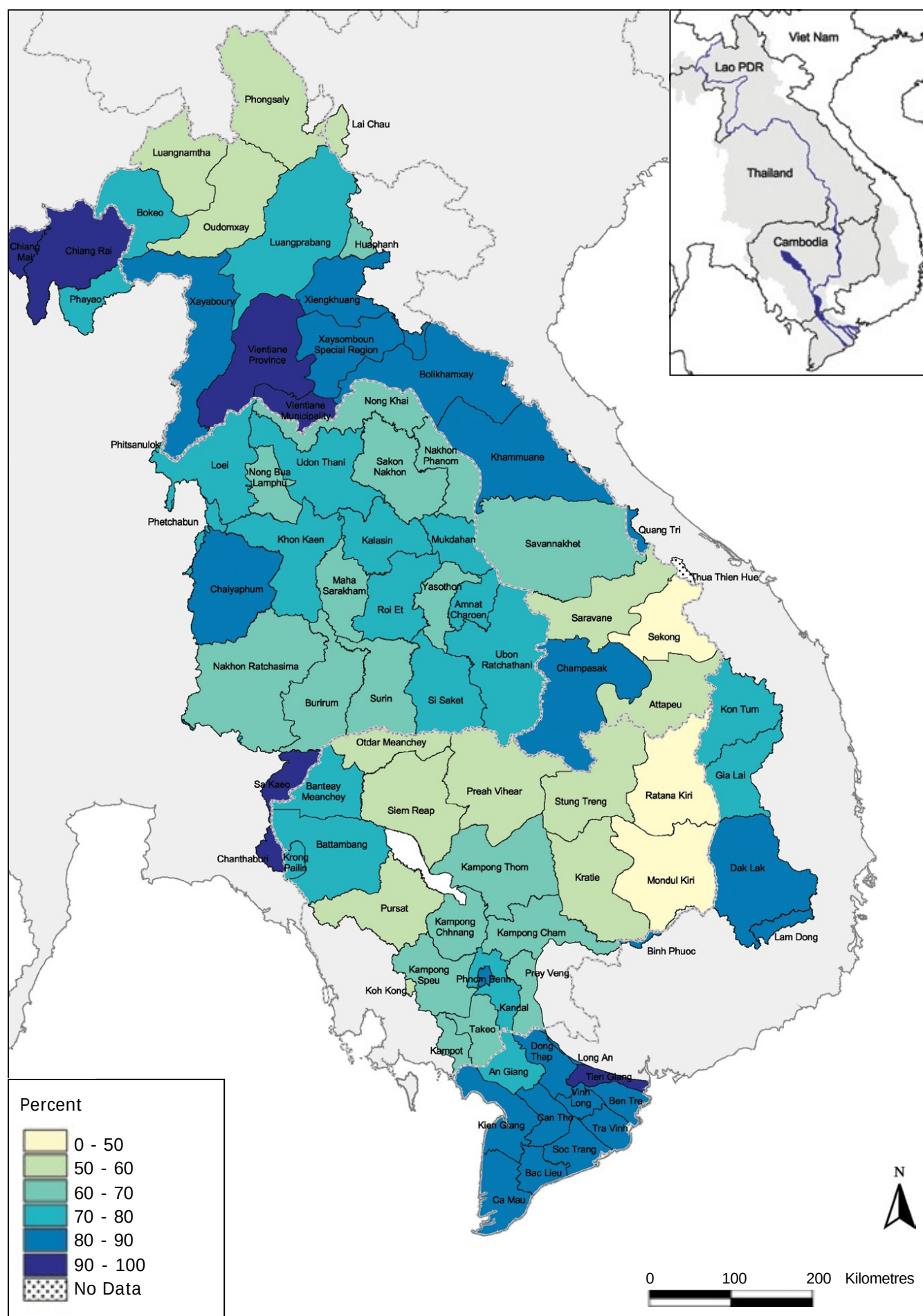
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Map 39: Primary Net Enrolment Ratio

Children of primary school age in primary school as a percentage of entire age group



Children of primary school age in primary school as a percentage of entire age group

The primary net enrolment ratio is the proportion of children of primary school age who are enrolled in primary school. It is an important indicator of a number of factors that influence the opportunities for young children to begin their studies.

In Viet Nam, government policies have promoted increased enrolment of young children in primary school. Throughout most of the Mekong Delta and the Central Highlands (as elsewhere in the country), over 80 percent of primary age children are enrolled in school. Overall, the data suggest that Viet Nam will shortly achieve universal primary education, particularly in urban areas.

Thailand has also achieved high primary net enrolment rates, as evidenced by the rates in the North region and the small portions of the East region situated in the LMB. However, in the poorer Northeast region, the lower, more variable rates suggest poorer access to primary schools and economic constraints on sending children to school.

Lao PDR has some high rates of primary net enrolment. The highest rates occur in the major urban centre (Vientiane Municipality) and the nearby, relatively prosperous rice-growing Vientiane Plain (Vientiane Province). In the provinces of the Central region of Lao PDR, where net enrolment rates are over 80 percent, there is wide variation in access to primary education between districts. However, provincial-level data suggest a clear trend towards increased overall enrolment of young children in school.

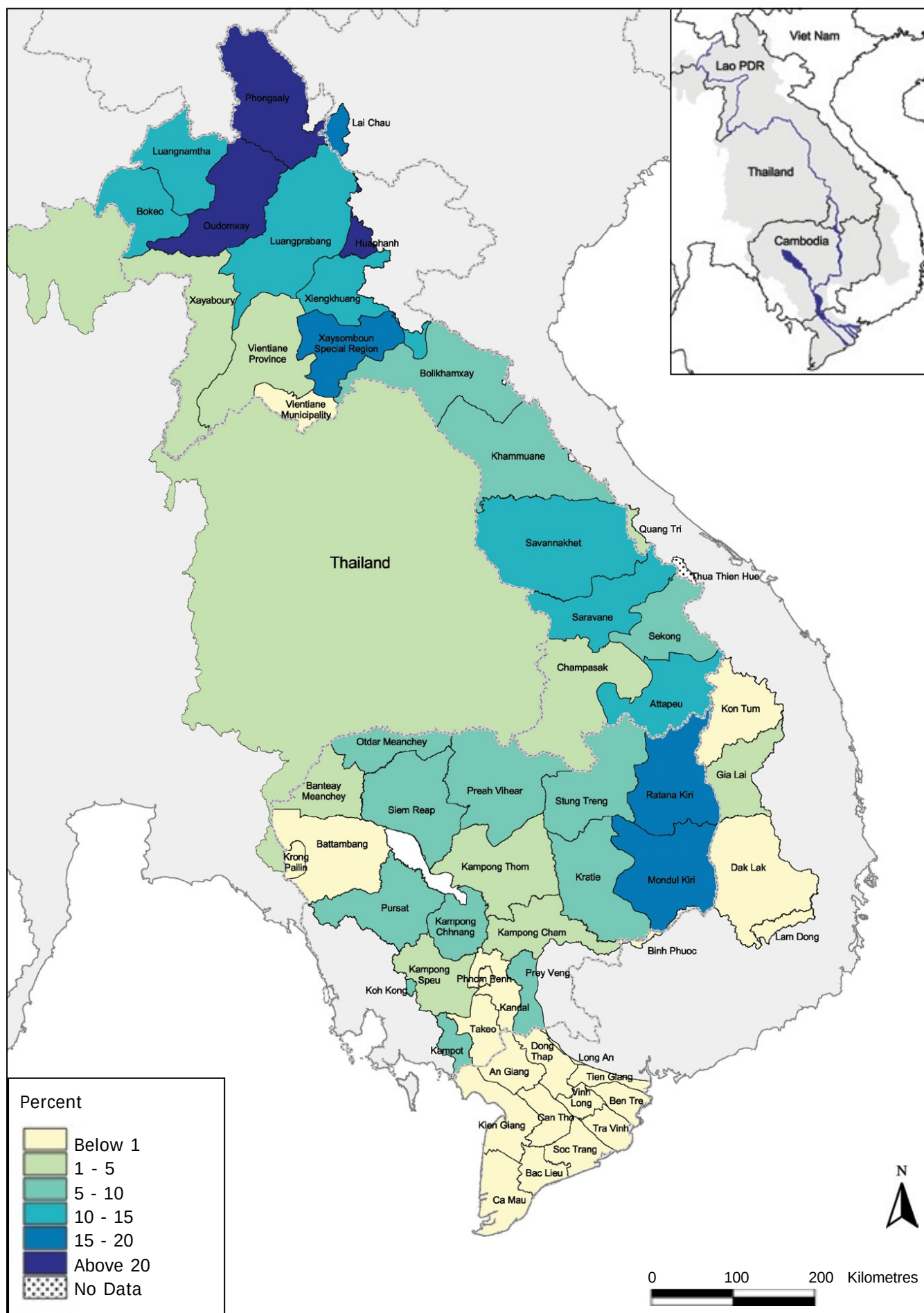
Within the LMB, Cambodia has the lowest overall primary net enrolment rate and the highest variation across the country. This is a lingering result of the dismantling of the education system under the Khmer Rouge. The highest rate (over 80 percent) occurs in Phnom Penh, the major urban centre, with decreasing rates in the surrounding provinces. High rates (over 70 percent) also occur in the relatively prosperous rice-growing areas in the northwest. However, throughout the mountainous areas of the country, lack of access to schools and poverty limit children's opportunities to study. In ethnic minority areas in the northeast net enrolment drops below 50 percent.

Country	Indicator Definition	Source	Table
Cambodia	Children aged 6-12 years enrolled in primary school as a percentage of all children aged 6-12 years (2000)*	Health Survey 2000	Table 2.6
Lao PDR	Children aged 6-10 years enrolled in primary school as a percentage of all children aged 6-10 years (1997/98)	Ministry of Education 1997-98	
Thailand	Net primary school enrolment ratio (1998). Data from source is in ranges: 62-70, 71-80, 81-90, 91-100.	UNICEF 2001	
Viet Nam	Net primary enrolment rate (1999)	MRC calculation based on Population Census 1999	Table 4.10x

* 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.

Map 40: Gender Enrolment Gap

Degree to which primary enrolment ratios are lower for females than males



Note: Province names and boundaries are not shown where national or regional data are used

Degree to which primary enrolment ratios are lower for females than males

The gender gap indicates the discrepancies between opportunities for young girls and boys to attend primary school, as measured by the differences between female and male primary enrolment rates. The gender gap is lowest in those countries, provinces and urban regions that have the highest overall primary net enrolment ratios. That is, where high percentages of children of primary school age are enrolled in school, this includes nearly equal proportions of boys and girls. Notable within the LMB are the Mekong Delta, the Central Highlands and the urban centres of Phnom Penh and Vientiane, as well as several Cambodian provinces.

As the overall primary net enrolment ratio declines, the gender gap increases. The data from Lao PDR show clearly that in most areas of the country, particularly in the remote, ethnic minority areas of the north, young girls do not have equal opportunities to study. This reflects cultural traditions that give higher priority to educating boys, the chores given to girls to help their mothers at home, and concerns about girls' safety if they have to travel long distances to schools. The notable exceptions are the urban centre of Vientiane and the surrounding Vientiane Plain, where young girls are generally as likely as boys to be enrolled in school.

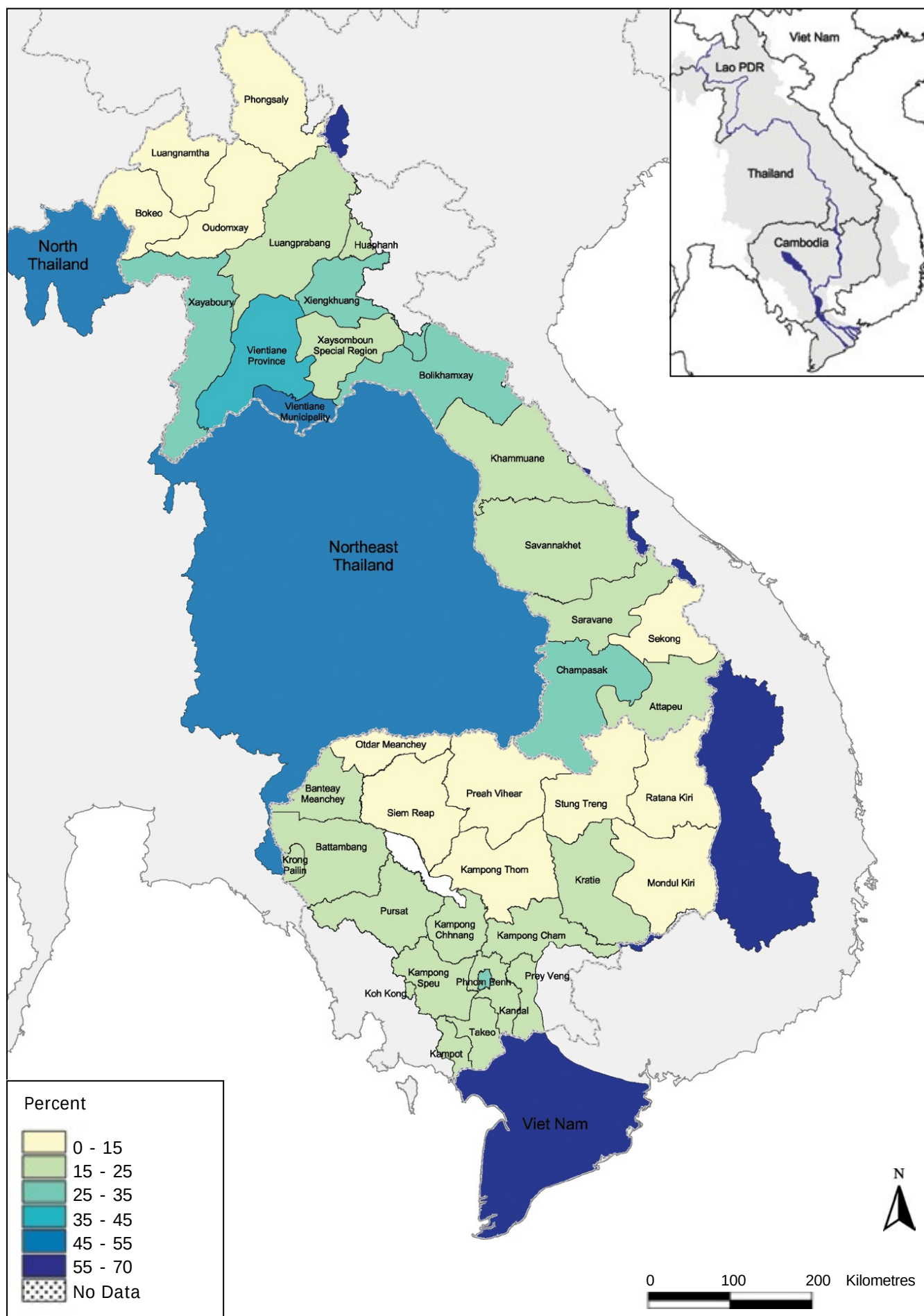
In Cambodia, also, provinces with low overall net enrolment rates have larger gender gaps. The gap is largest in the northeast provinces of Ratana Kiri and Mondul Kiri, where ethnic minority groups predominate.

Country	Indicator Definition	Source	Table
Cambodia	Difference between male and female primary enrolment as a percentage of male primary enrolment (2000)*	Health Survey 2000	Table 2.6
Lao PDR	Difference between male and female primary enrolment as a percentage of male primary enrolment (1997/1998)	Ministry of Education 1997-98	
Thailand	Difference between male and female primary enrolment as a percentage of male primary enrolment	UNESCO 2002	
Viet Nam	Difference between male and female primary enrolment as a percentage of male primary enrolment	MRC calculation based on Population Census 1999	Table 4.10x

* 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.

Map 41: Primary Attainment

Proportion of population who have completed primary school



Note: Province names and boundaries are not shown where national or regional data are used

Proportion of population who have completed primary school

Increasing rates of primary net enrolment in the LMB (see Map 39) have not yet translated into similar proportions of children who successfully complete the primary level and move on to higher levels. Also, there is a marked difference between the portions of Thailand and Vietnam in the LMB and the countries of Cambodia and Lao PDR.

Thailand and Viet Nam have the highest levels of primary school attainment. However, only about half of the population of North and Northeast Thailand, and around 65 percent in Viet Nam, have completed this level of basic education. Across Thailand as a whole, the primary attainment rate is 57 percent. Despite government programs to promote primary education in these countries, there are still large numbers of children who do not finish, often leaving school early to work.

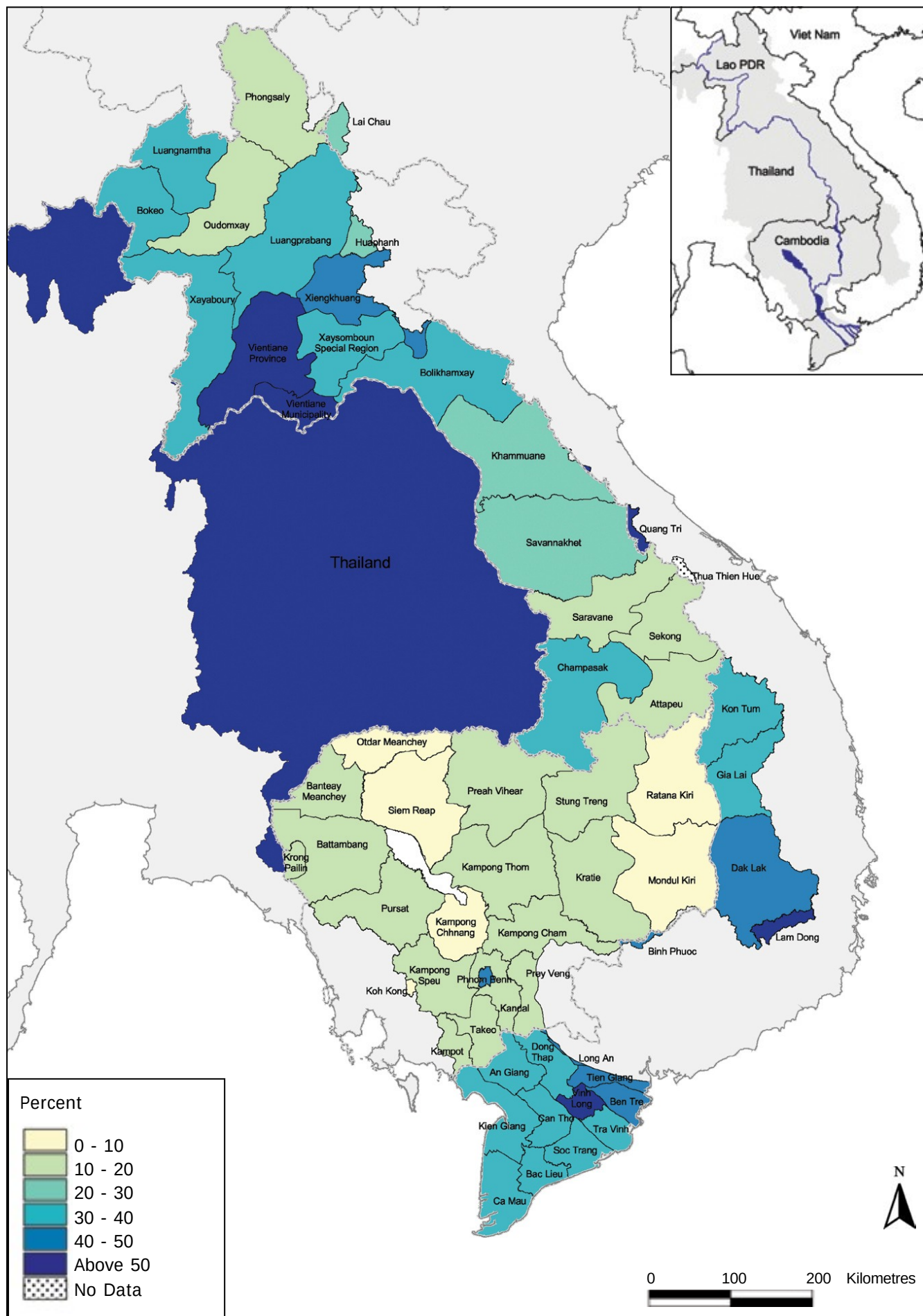
In Cambodia and Lao PDR, the situation is more serious. Primary attainment levels are very low (often below 25 percent), particularly in areas with low enrolment rates. Where the net enrolment rates are highest - the urban centre of Vientiane and the surrounding Vientiane Plain - approximately 40 to 50 percent of the population has completed their primary education. However, in many remote upland and ethnic minority areas of both countries, the proportion of children who complete primary school is negligible.

The low attainment rates and the wide discrepancies will have serious consequences for the future social and economic development of the LMB. The proportion of young children is very high and very shortly they will start to enter the labour force. Those who have not completed primary school will have greater difficulties finding work and will be more likely to receive low incomes.

Country	Indicator Definition	Source	Table
Cambodia	Percentage of population aged 15 and over that have completed primary school (1998)	Population Census 1998	PopMap
Lao PDR	Percentage of population 6 years old and above whose highest level of educational attainment is primary or above (1995)	Population Census 1995	Table 4.5
Thailand	Percentage of regional population 15 years and over whose highest level of education attainment is primary or above (2002)	Labour Survey 2002	Table 3
Viet Nam	Percentage of the population 15 years and over that have attained a primary diploma or above (1997/98)	Viet Nam Living Standards Survey 1997/98	Table 2.52

Map 42: Secondary Net Enrolment Ratio

Secondary school aged children in secondary school as a percentage of entire age group



Note: Province names and boundaries are not shown where national or regional data are used

Secondary school aged children in secondary school as a percentage of entire age group

Throughout the LMB, the proportions of young people of secondary school age who are enrolled in secondary school are lower than primary net enrolment rates (see Map 39). Many young people leave school to join the labour force. Their income is an important contribution to household finances. Also, many young people cannot attend secondary school because their families cannot afford associated costs such as fees and books.

Thailand has the highest overall proportion of secondary school aged children in secondary school, at over 50 percent. In general, household incomes are highest in this part of the LMB, which may reduce the pressures on young people to work rather than continue their education.

In Viet Nam, secondary school enrolment rates are significantly lower than for primary school. While government programs have targeted universal primary education, there remain economic and other constraints that result in fewer young people continuing to the secondary level. The highest rates occur in delta provinces that are near the urban centre of Ho Chi Minh City (outside the LMB) and in parts of the Central Highlands. In the latter instance, the recent influx of migrants from lowland areas may have included larger proportions of households who want and are able to send their children to secondary school.

In Lao PDR, the rates of secondary net enrolment are lower, but tend to mirror the rates of primary net enrolment. They also include some of the highest rates in the LMB, in the urban area of Vientiane and the surrounding Vientiane Plain.

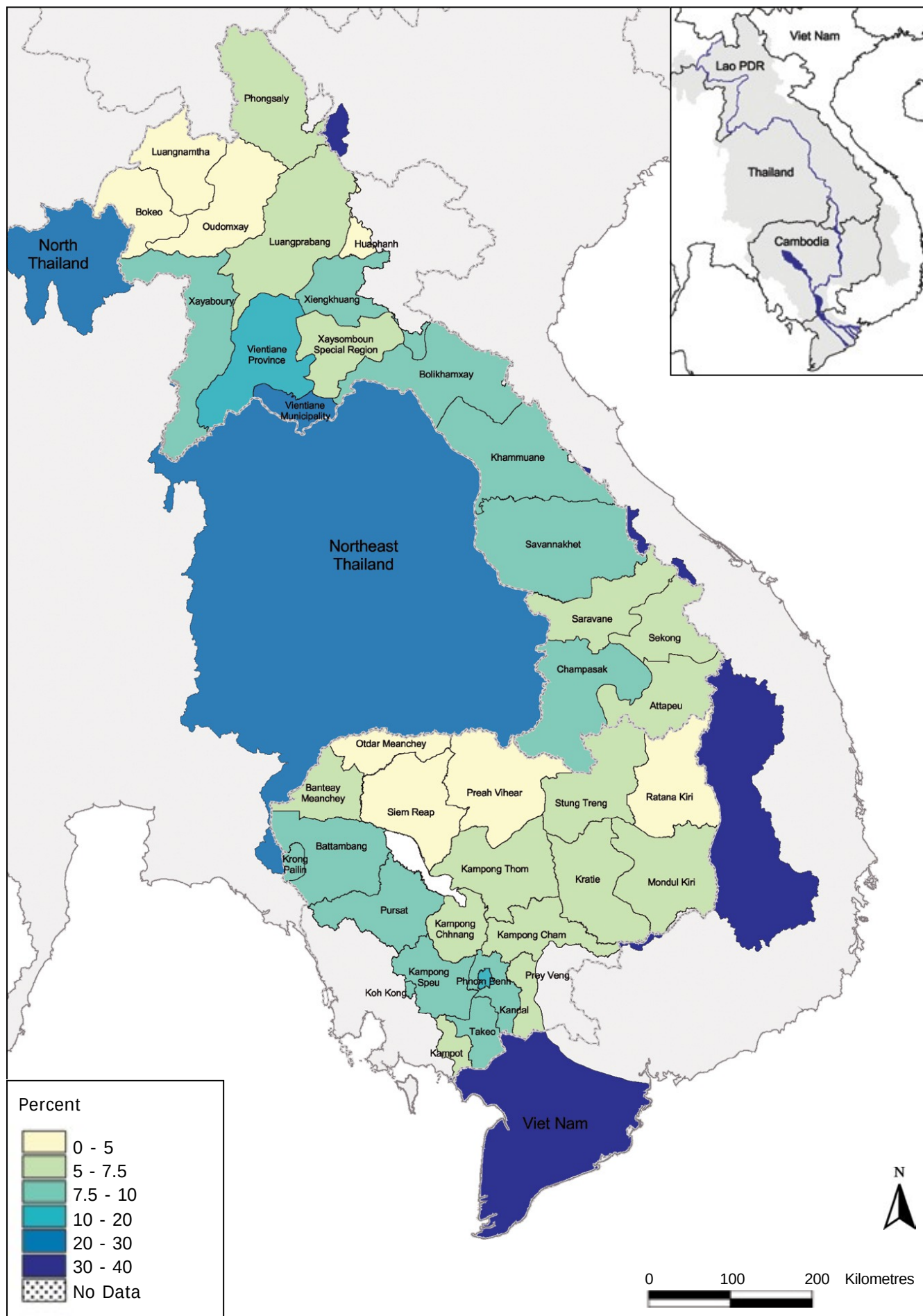
In Cambodia, the situation is very different. Outside of Phnom Penh, fewer than 20 percent of people of secondary school age are enrolled in school. Most young people are working by this age, and the network of secondary schools is very sparse throughout much of the country. The average distance from a village to the nearest lower secondary school is estimated at 27 km, too far for daily travel (MOP-Cambodia 1999).

Country	Indicator Definition	Source	Table
Cambodia	Children aged 13-18 years enrolled in secondary school as a percentage of all children aged 13-18 years (2000)*	Health Survey 2000	Table 2.6
Lao PDR	Unweighted average of net enrolment ratios for lower secondary school and upper secondary school (1999/2000)	Human Development Report 2001	
Thailand	Secondary net enrolment ratio (1999/2000)	UNESCO 2002	
Viet Nam	Net secondary enrolment rate (1999)	MRC calculation based on Population Census 1999	Table 4.10x

* 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.

Map 43: Lower Secondary Attainment

Proportion of population who have completed lower secondary school



Note: Province names and boundaries are not shown where national or regional data are used

Map 43: Lower Secondary Attainment

Proportion of population who have completed lower secondary school

The proportions of people in the LMB who complete lower secondary school are low. The highest levels are in Viet Nam (based on national level data) and these are still below 40 percent. As with primary attainment rates (see Map 41), relatively higher educational attainment in Thailand and Viet Nam contrasts sharply with rates in Cambodia and Lao PDR.

The attainment rate for Northeast Thailand is 28.4 percent, and for the whole of Viet Nam is 39.7 percent. If province-level data were available for Viet Nam, it would probably show lower rates for the predominantly rural LMB provinces. In these two countries, the majority of the population enters the workforce and does not complete lower secondary school. This is reflected, in Viet Nam, in upper secondary enrolment rates that are less than 20 percent (UNDP-Viet Nam 2001).

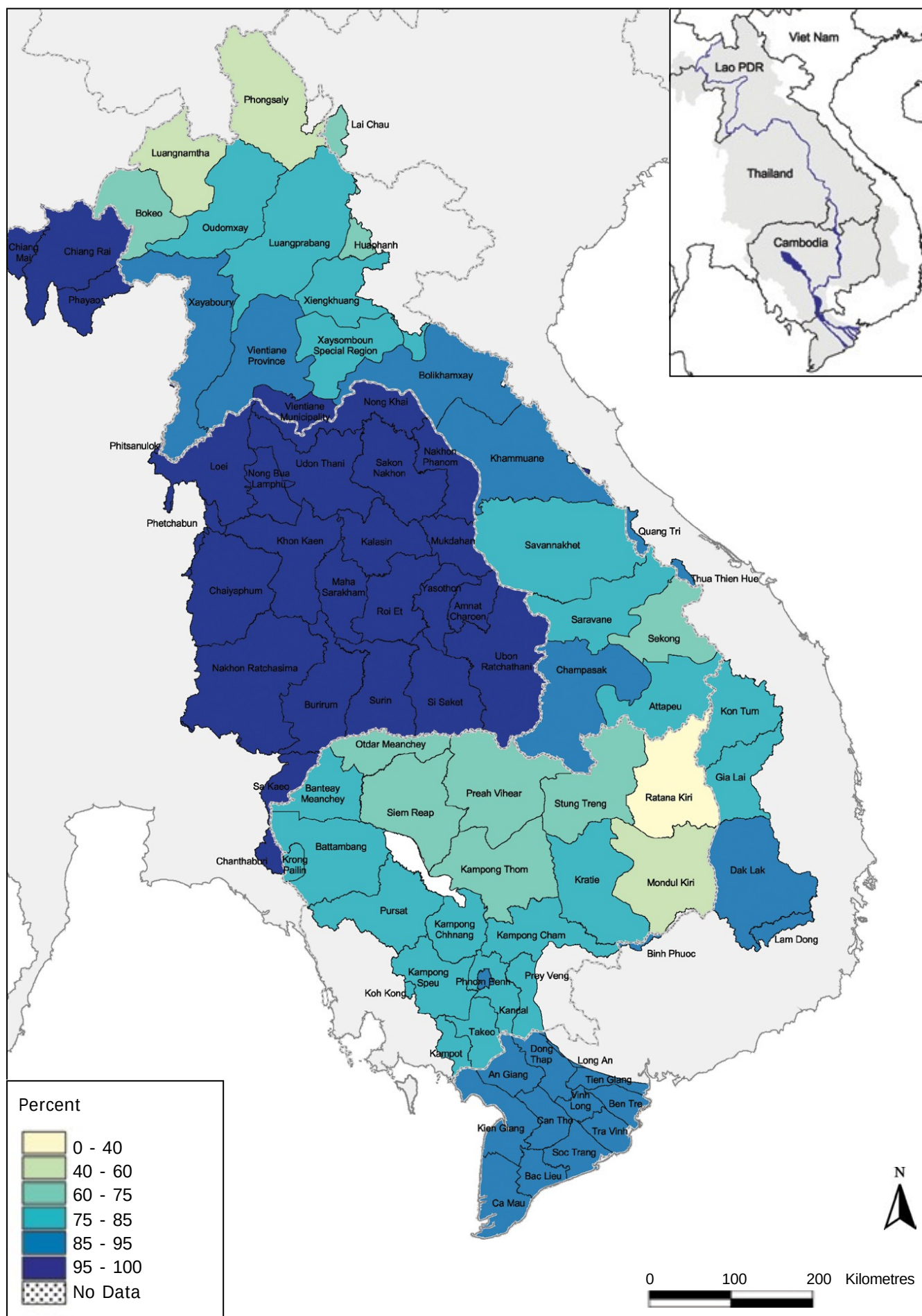
The lower secondary attainment levels are variable across Cambodia and Lao PDR. However, outside the urban areas of Phnom Penh and Vientiane, the rates do not generally exceed 10 percent. The ethnic minority areas in northern and northeastern Cambodia and northern Lao PDR have the lowest rates.

As young adults enter the work force in large numbers in the coming years, many will lack the education and knowledge to meet the increasing demand for skilled, technical and professional workers in the evolving economies of the LMB countries. This will have serious consequences for social and economic development within the region.

Country	Indicator Definition	Source	Table
Cambodia	Percentage of population aged 18 and over that have completed lower secondary school (1998)	Population Census 1998	PopMap
Lao PDR	Percentage of population 6 years old and above whose highest level of education attainment is lower secondary or above (1995)	Population Census 1995	Table 4.5
Thailand	Percentage of regional population 15 years and over whose highest level of education attainment is lower secondary or above (2002)	Labour Survey 2002	Table 3
Viet Nam	Percentage of the population 15 years and over that have attained a lower secondary diploma or above (1997/98)	Viet Nam Living Standards Survey 1997/98	Table 2.52

Map 44: Male Literacy Rate

Proportion of adult males able to read and write



Map 44: Male Literacy Rate

Proportion of adult males able to read and write

The proportions of men over the age 15 years who can read vary widely across the LMB. In the Korat Plateau and the North region of Thailand, nearly all adult men are literate. In the Mekong Delta and the Central Highlands of Viet Nam, literate men account for more than 80 percent of the adult male population.

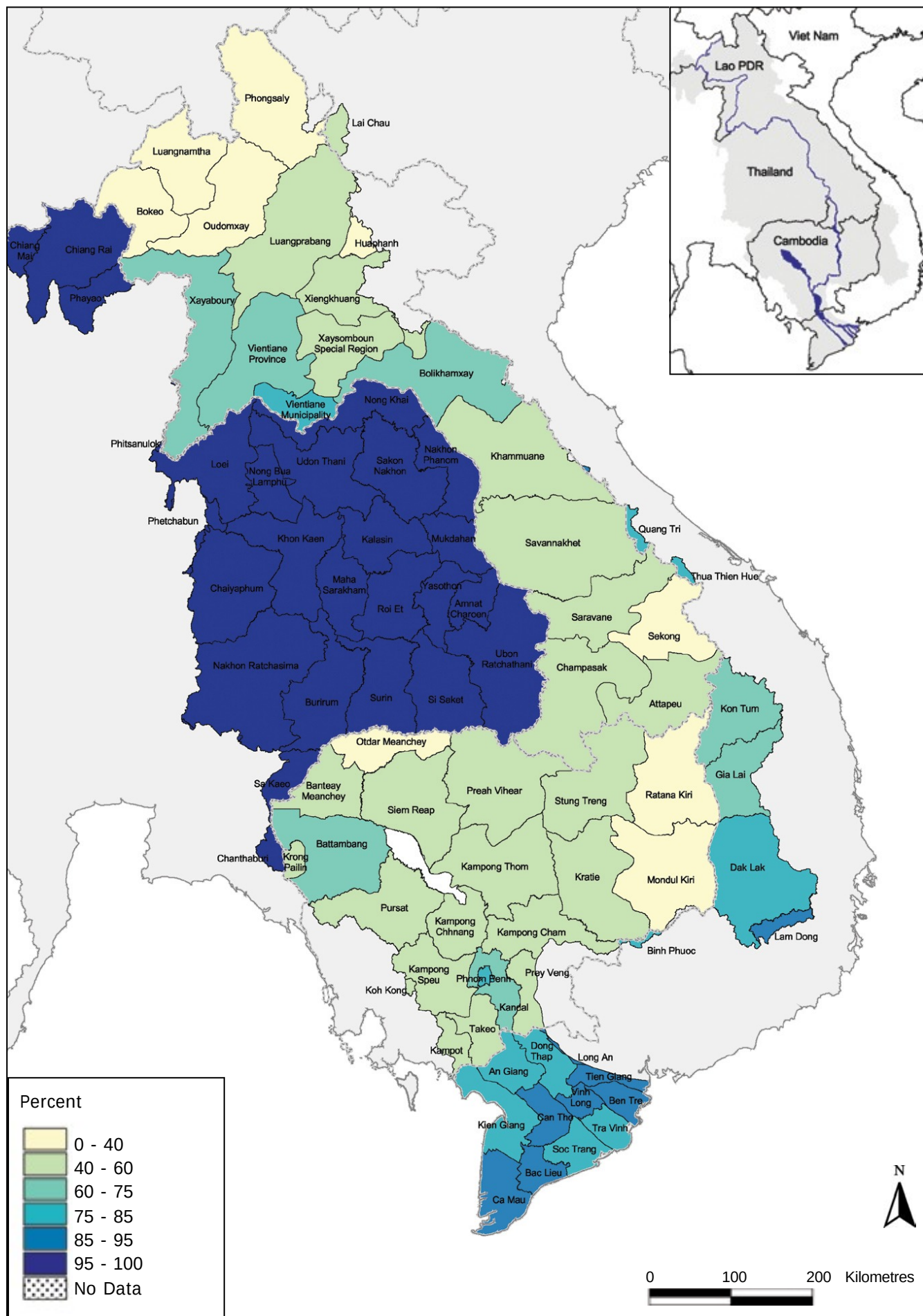
In Cambodia and Lao PDR, however, it is only in the urban areas of Phnom Penh and Vientiane Municipality that male literacy exceeds 90 percent of the adult male population. Elsewhere in these countries, male literacy ranges from less than 60 percent to approximately 80 percent. The low rate for Cambodia may reflect the large numbers of adults who missed out on their basic education during the Khmer Rouge and civil war periods.

Remote upland provinces that have large ethnic minority populations have the lowest levels of male literacy. These include Phongsaly and Luangnamtha in northern Lao PDR, and Ratana Kiri and Mondul Kiri in Cambodia.

Country	Indicator Definition	Source	Table
Cambodia	Percentage of males aged 15 and over that are literate (1998)	Population Census 1998	PopMap
Lao PDR	The percentage of the male population 15 years and above who can read and write a simple statement (1998)	Expenditure and Consumption Survey 1997/98	Table 20
Thailand	Percentage of male population who are literate (1995). Figures for illiterates include all males 14 years or older who did not complete Grade 4.	National Education Committee 1995	
Viet Nam	Percentage of males 15 years and over that are literate (1999)	Population Census 1999	Table 4.1

Map 45: Female Literacy Rate

Proportion of adult females able to read and write



Proportion of adult females able to read and write

The proportions of literate women over the age of 15 years vary widely across the LMB. In comparison with male literacy rates, fewer women are literate and the range of female literacy rates is wider (see Map 44). Where overall literacy rates are low, in northern Lao PDR for example, the differences between male and female rates tend to be higher than elsewhere.

In the Korat Plateau and the North region of Thailand, nearly all adult women are literate. In the Mekong Delta, literate women account for more than 80 percent of the adult female population. That is, in these regions, men and women have similar literacy rates.

In the province of Dak Lak, more than 80 percent of women are literate, compared with lower rates in other provinces in the Central Highlands. This may be due, in part, to a higher proportion of recent in-migrants from lowland areas, where female literacy rates tend to be higher.

The highest levels of female literacy in Cambodia and Lao PDR occur in the urban areas of Phnom Penh (over 70 percent) and Vientiane Municipality (over 80 percent). The levels of literacy among urban women are approximately 10 percentage points lower than among urban men.

In much of Cambodia and Lao PDR, however, literacy among adult women is below 60 percent. The rates of literacy among ethnic minority women in remote rural areas are extremely low. Among some ethnic minority groups in northern Lao PDR, for example, women have literacy rates as low as 10 to 30 percent (RTI 2001).

Country	Indicator Definition	Source	Table
Cambodia	Percentage of females aged 15 and over that are literate (1998)	Population Census 1998	PopMap
Lao PDR	The percentage of the female population 15 years and above who can read and write a simple statement (1998)	Expenditure and Consumption Survey 1997/98	Table 20
Thailand	Percentage of female population who are literate (1995). Figures for illiterates include all females 14 years or older who did not complete Grade 4.	National Education Committee 1995	
Viet Nam	Percentage of females 15 years and over that are literate (1999)	Population Census 1999	Table 4.1



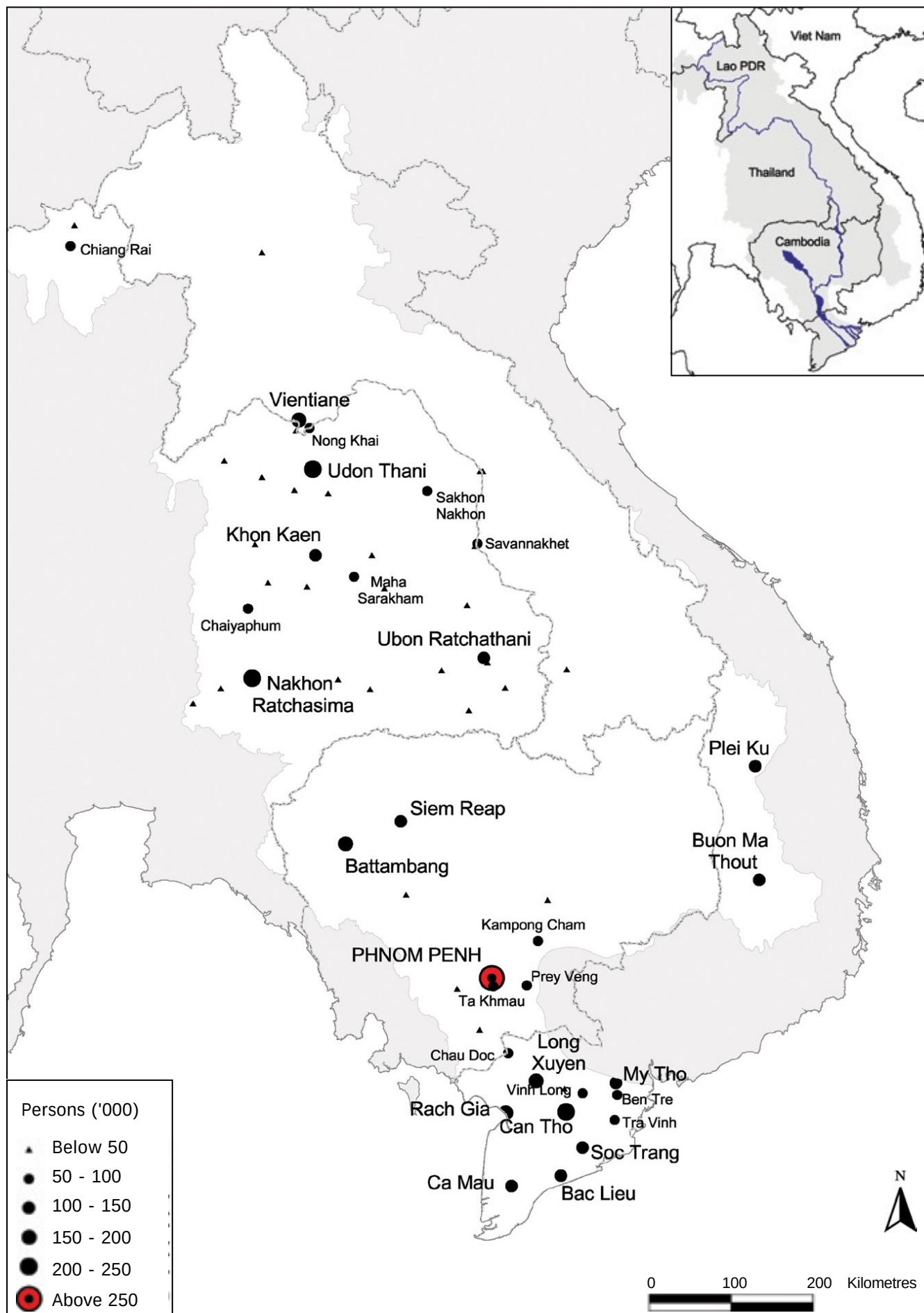
Additional Maps

Additional Maps

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Map 46: Urban Centres

Urban areas by population size



Urban areas by population size

The urban population of the basin is largely concentrated in the capitals Phnom Penh (1,134,000 persons) and Vientiane (190,000 persons), as well as major provincial centres including Can Tho and Rach Gai in Viet Nam, Udon Thani and Nakon Rachasima in Thailand, and Battambang in Cambodia. The secondary centres are growing rapidly and some are already larger than Vientiane.

City dwellers in the LMB tend to enjoy better social conditions than most rural residents. Schools and hospitals are concentrated in the larger urban centres. Public services, such as improved water supply and electricity, are also more extensive in the cities.

Incomes are higher in urban centres than in rural areas. However, many cities also contain large concentrations of poor people, many of whom are migrants from the countryside. The poor in cities have less access to land than those in rural areas, meaning that they are less able to grow food to feed themselves.

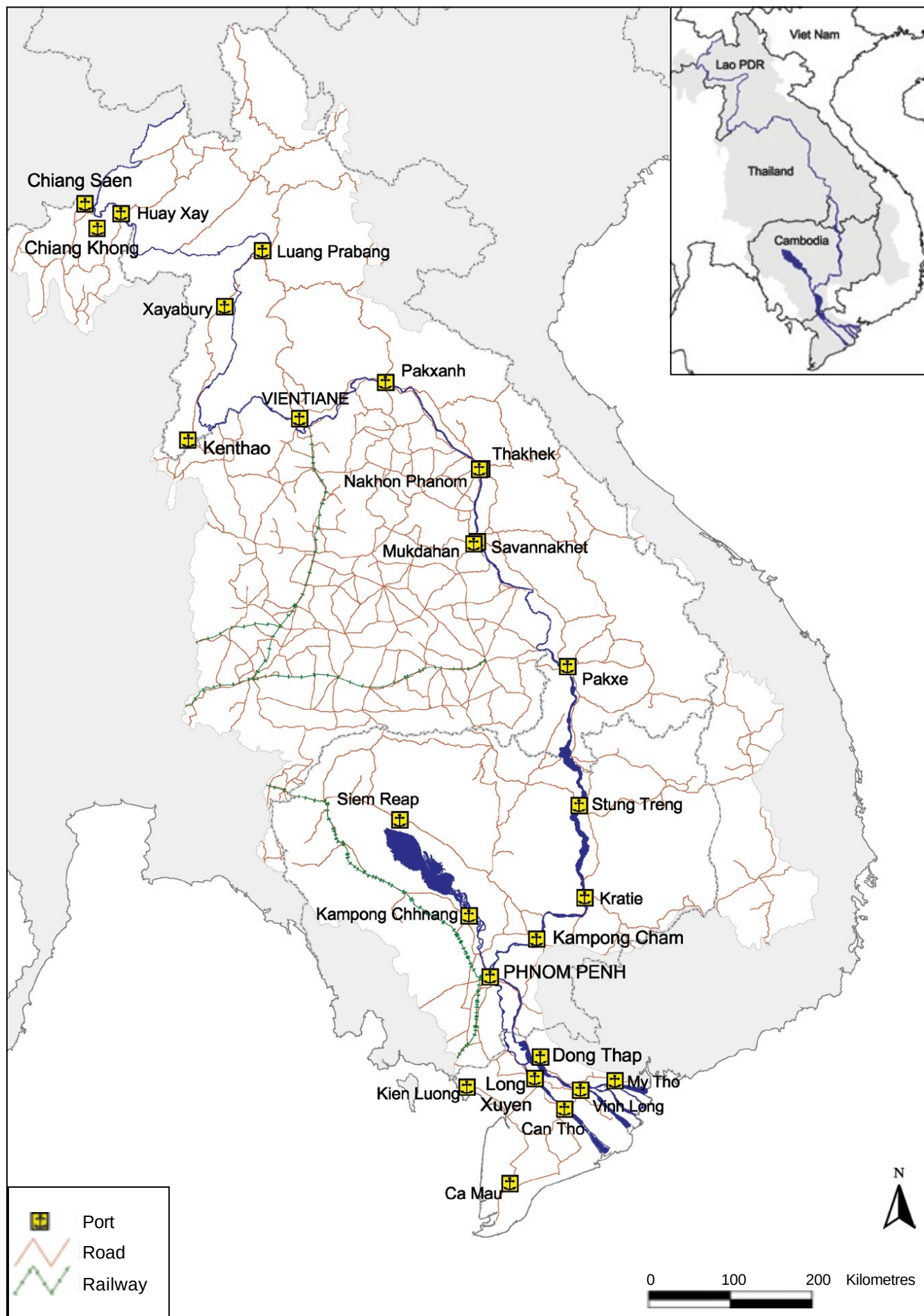
In Thailand there is a strip of comparatively more urbanized provinces running down the centre of the Korat Plateau. These provinces contain larger cities than others in the region and lie along a major highway that runs from Bangkok to Vientiane.

One phenomenon that this map fails to capture is the fact that in major centres such as Phnom Penh and Vientiane, new arrivals tend to settle on the outskirts of the city, in effect converting semi-rural areas to urban areas, although the official zoning may only change slowly. The total population of many cities may thus be underestimated.

Source: World Population Gazetteer 2002

Map 47: Transport Infrastructure

Regional transport network



Regional transport network

The presence of road, railway or waterway infrastructure is an important determinant of the accessibility or remoteness of the various communities of the LMB. As noted in other parts of the Atlas, there is often a correlation between remoteness and social disadvantage.

Northeast Thailand is the most accessible part of the basin. This region is criss-crossed by a network of all-weather roads and highways. Of particular importance is the highway running from Bangkok to Nong Khai, which is joined by bridge to Vientiane.

The Mekong Delta is also served by a number of well-maintained major roads and bridges, supplemented by a dense network of canals. Waterborne traffic in the Delta accounts for 73 percent of all transport of goods and 27 percent of all passenger transport in the region (MRC 2003).

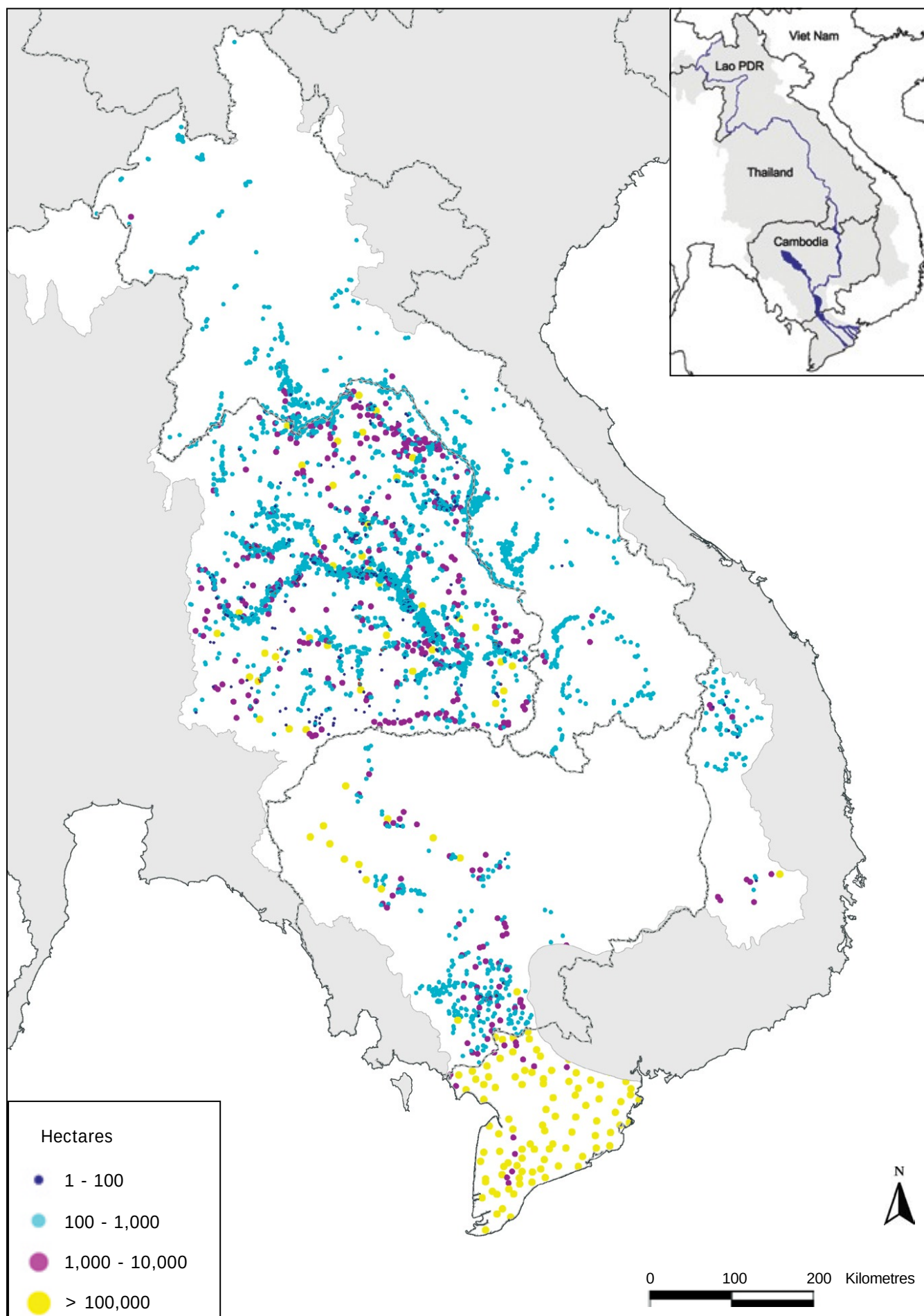
Road coverage is much sparser in Cambodia and Lao PDR. In these countries many roads are in poor condition and are often not passable during the wet season. In both countries, the governments, along with donors, are investing considerable resources into upgrading and maintenance of the road network.

Numerous inland ports serve the mainstream of the Mekong. Most stretches of the river are navigable during the high water season, which lasts for about eight months of the year. During the dry season, several areas are only navigable by smaller vessels. Between Pakxe in southern Lao PDR and Stung Treng in Cambodia, however, lie the Khone Falls, which are impassable.

Source: MRC Navigation Programme

Map 48: Irrigation

Size of irrigation areas



Size of irrigation areas

This map shows the location and size of irrigation areas in the LMB. The map is based on data compiled by MRC from national statistics. Irrigation areas less than 1 hectare in size are not shown.

Irrigation is an important driver of agricultural and economic development in the LMB. Rice is the LMB's main agricultural product, and of a total of 8.6 million ha under rice cultivation in 2000, about 3.7 million ha were irrigated. In addition to supplementing rainfall in the wet season, irrigation allows production of two or even three rice crops a year. As such, irrigation is an important determinant of agricultural productivity. Rice yields have risen rapidly over the last 10-15 years as use of irrigation has increased.

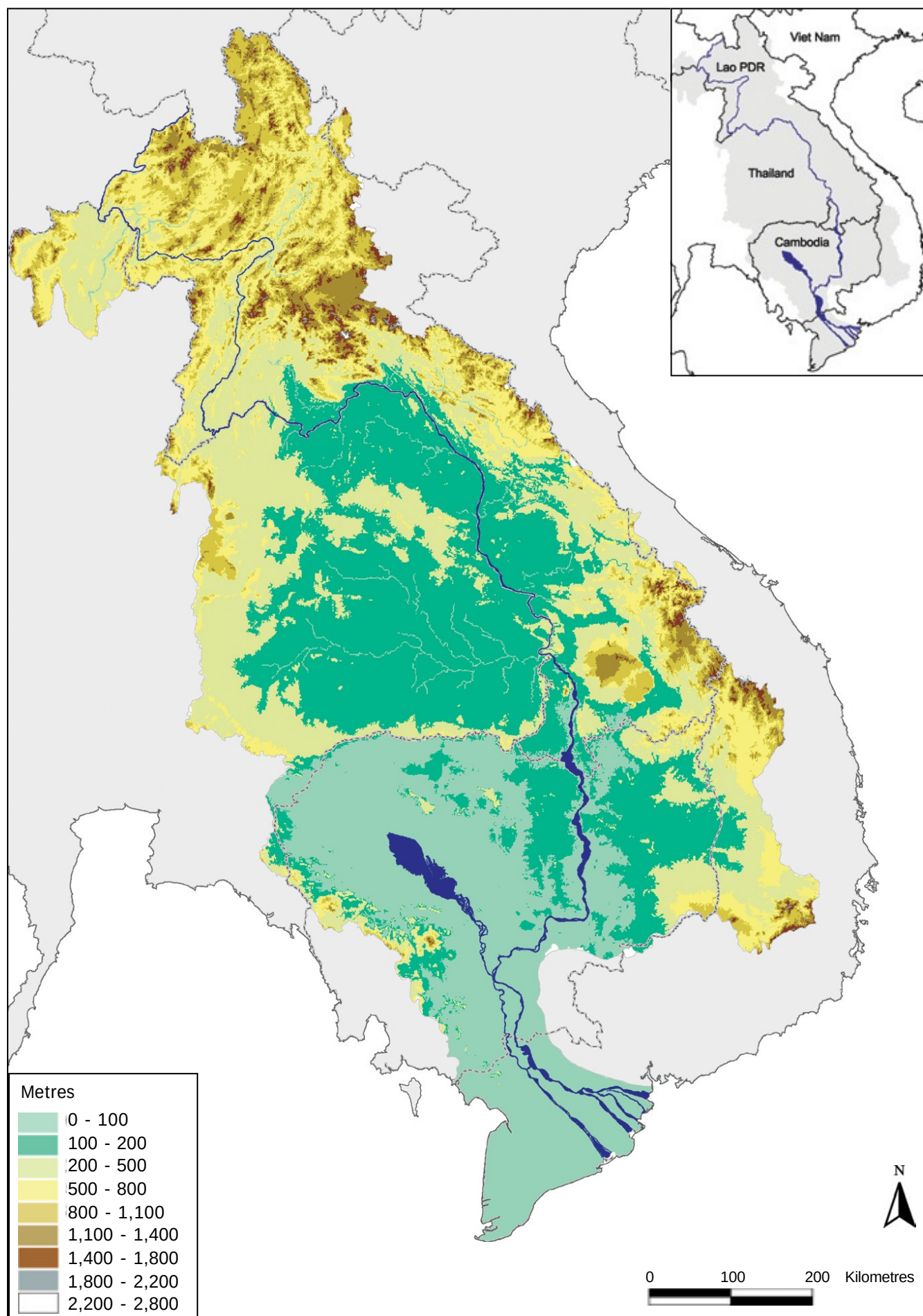
Irrigation is also used for growing fruit, vegetables, and crops such as kenaf, groundnuts, mungbeans and maize. Access to irrigation facilities can assist farmers in diversifying out of rice production and into more lucrative crops.

Types of irrigation vary widely, from simple operations lifting water manually from rivers, to large schemes operating from reservoirs. Large-scale irrigation schemes have been extensively developed in the Korat Plateau and the Vietnamese Delta. About 85 percent of the areas under dry season irrigation in the LMB in 2000 were in the Vietnamese Delta.

Source: MRC 2002

Map 49: Elevation

Elevation above sea level



Elevation above sea level

The topography of the LMB varies from high mountains in the north and east to low-lying areas in the south. The slope and elevation of the land in different parts of the basin is a major determinant of both land use and the accessibility of human settlements.

The mountains of northern Lao PDR and northern Thailand are characterized by rugged terrain, with peaks of over 2,000 m, and valleys at about 250-500 m. Much of these areas remain under forest and woodland, with agricultural development in the valleys and shifting cultivation on the slopes.

The mountains stretch south and east as the Annam-Cordillera chain, which forms the border between Lao PDR and Viet Nam. The peaks of this mountain range are over 2,500 m. Altitude gradually decreases as the range runs southwest and terminates in the Central Highlands of Viet Nam and the eastern uplands of Cambodia.

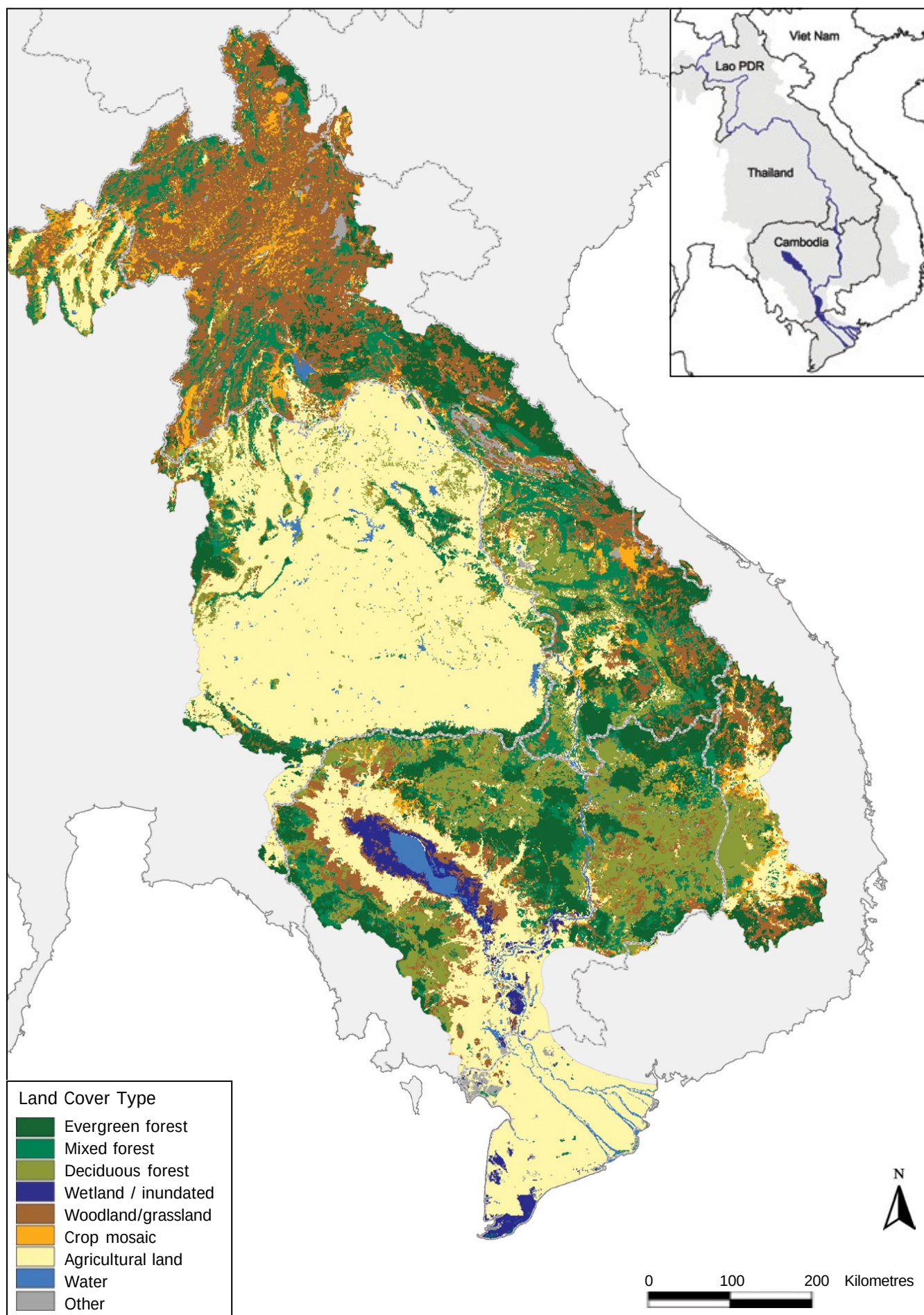
In the west, the Korat Plateau of Northeast Thailand is predominantly flat agricultural land at around 2-300 m, rimmed by mountains rising to about 1,200 m in the west and south.

The hills of northeast Cambodia (50-200 m) remain largely under forest, with limited agricultural development.

The Mekong lowlands and plain of the Tonle Sap Lake are flat rice-growing areas at elevations below 50 m, much of which is prone to inundation in the annual wet season floods. The river enters the sea through the Mekong Delta, a low-lying area (mostly below 10 m) which supports intensive rice cultivation.

Source: MRC 2001

Major land cover categories



Major land cover categories

This map shows land cover in the LMB. The data is based on interpretations of remotely sensed Landsat TM imagery from 1997 and is a simplified version of a land cover map held by the MRC.

Extensive areas of agriculture (mainly rice cultivation) are dominant on the Korat Plateau, in the Vietnamese and Cambodian delta regions, and around Tonle Sap Lake. An intricate mosaic of agricultural cultivation and forest (including agro-forestry and shifting cultivation practices) is typical in upland areas such as northern Lao PDR.

More than a third of the LMB remained under forest cover in 1997. Much of this area was low-density deciduous forest in the north and east of the Cambodian plain. The main areas of tropical forest are in the more mountainous areas of Cambodia and southern and eastern Lao PDR. Northern Lao PDR is characterized by mixed forest with large areas of woodland, often associated with shifting cultivation.

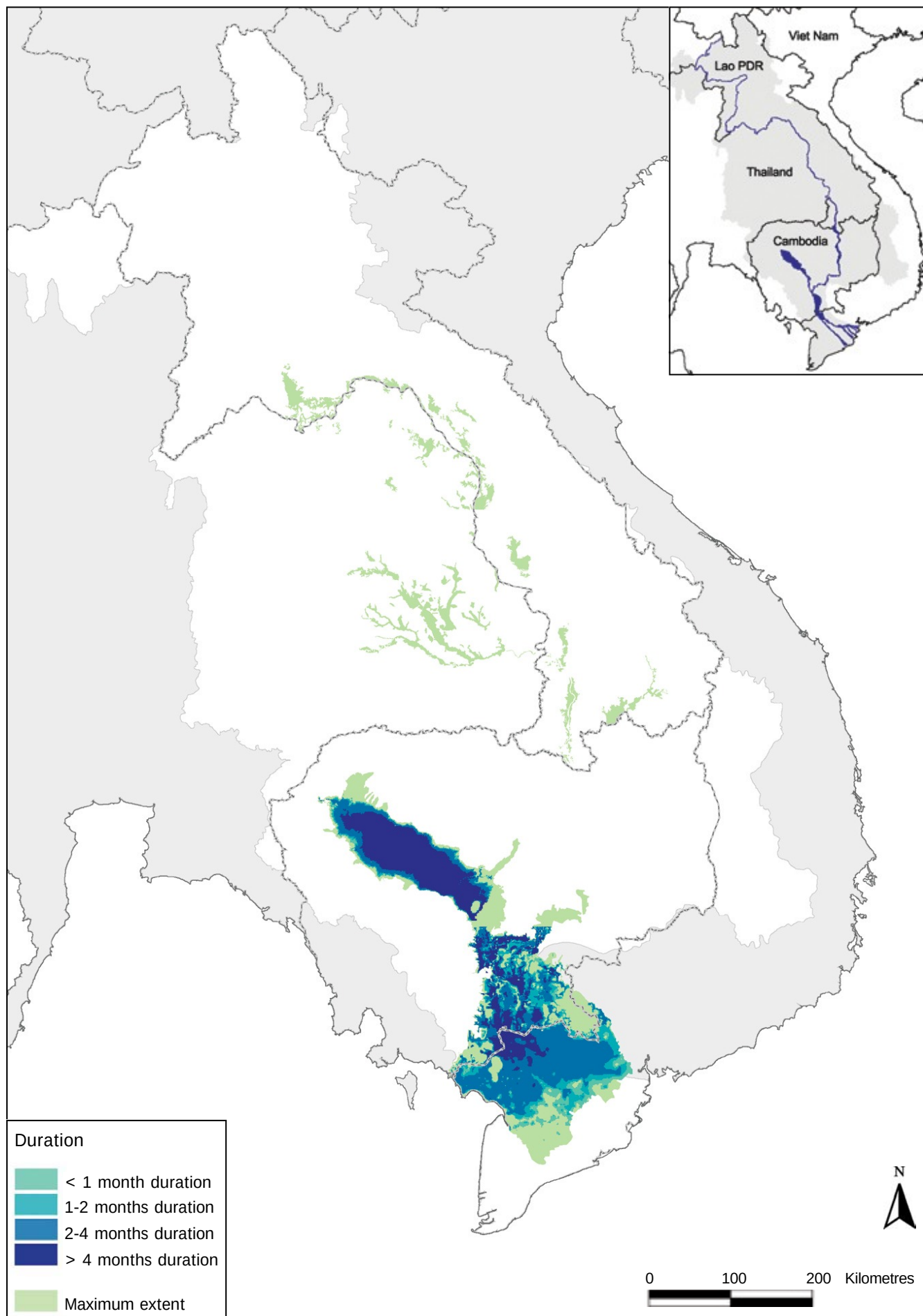
Extensive wetlands and flooded forests are found around the Great Lake. Most of the mangroves of the Delta have been cleared, although some replanting of mangroves is under way.

The forests of the LMB - including flooded forests and mangroves, which are important habitats for fish - are under increasing pressure. Clearing continues despite government bans, and it is likely that the area of forest has decreased substantially since this study was undertaken in 1997.

Source: MRC 2001

Map 51: Flood Prone Areas

Duration and extent of major floods



Duration and extent of major floods

Flooding is a part of the natural cycle of the Mekong River. The annual monsoon rains flow down the river with such force that the Mekong pushes the Tonle Sap River backwards to expand the Great Lake to approximately four times its dry season size. Further downstream, the Mekong spills over its banks in the Delta, flooding large areas for several months at a time. In the northern parts of the LMB, flash floods that rise and fall quickly are common on the Mekong mainstream and its tributaries. In the lowlands around the Great Lake and the Delta, large areas are inundated for between one and four months.

Flooding is an important part of the ecology of the region - flooded forests and seasonal wetlands are important habitats for fish and support much of the region's biodiversity. Flood waters are used to irrigate the rice crop, and also replenish soil fertility. However, flooding can also cause great damage to agriculture, infrastructure and human life. In 2000, exceptionally serious floods caused 800 deaths and \$400 million worth of damage.

The map shows flood prone areas, based on the maximum extent of inundation during a major flood, (a 1 in 20 year event) as well as the estimated duration of inundation during a medium intensity flood (a 1 in 5 year event.) The flood extent data was derived by the MRC from Radarsat images at three dates in 2000 and from field surveys. The duration estimates were developed using an hydraulic model simulation of the flooding that occurred in 2001, and were verified with Radarsat imagery and field surveys. Data were not collected for eastern Cambodia, but it is known that flooding occurs in this area.

The MRC website at www.mrcmekong.org provides 3-day flood forecasts during the wet season and other data on flood depth and duration.

Source: MRC 2002



Appendices

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Table 1: Population Indicators I

	Population	Population Density	Population Growth Rate	Rural Population	Age Structure: 0-14	Age Structure: 15-24
	('000)	(per km ²)	(annual %)	(%)	(%)	(%)
Cambodia						
Whole Country			2.5			
Banteay Meanchey	577.8	86.5		82.9	44.3	17.8
Battambang	793.1	67.8		82.4	44.4	17.2
Kampong Cham	1,608.9	164.2		97.2	42.1	18.9
Kampong Chhnang	417.7	75.7		90.0	44.5	16.1
Kampong Speu	598.9	85.3		93.1	45.5	17.3
Kampong Thom	569.1	41.2		88.4	44.3	18.7
Kampot	528.4	108.4		93.7	44.9	17.1
Kandal	1,075.1	301.3		94.6	42.0	17.9
Koh Kong	132.1	11.8		77.8	40.7	17.1
Kratie	263.2	23.7		69.9	41.2	19.5
Mondul Kiri	32.4	2.3		78.3	43.8	16.7
Phnom Penh	999.8	3,447.6		43.0	33.1	22.9
Preah Vihear	119.3	8.6		81.9	44.6	18.8
Prey Veng	946.0	193.7		94.2	42.7	19.0
Pursat	360.4	28.4		84.0	47.2	15.4
Ratana Kiri	94.2	8.7		82.0	44.4	16.4
Siem Reap	696.2	67.6		82.8	45.3	18.5
Sihanouk Ville	155.7	179.4		0.0	43.1	17.5
Stung Treng	81.1	7.3		69.8	43.7	18.1
Svay Rieng	478.3	161.2		95.6	44.8	16.9
Takeo	790.2	221.8		95.0	44.2	17.1
Otdar Meanchey	68.3	11.1		67.3	48.2	15.7
Krong Kep	28.7	85.3		0.0	46.1	16.7
Krong Pailin	22.9	28.5		0.0	40.3	15.3
Lao PDR						
Whole Country						
Vientiane Municipality	524.1	133.7	3.0	36.9	37.7	22.8
Phongsaly	152.8	9.4	3.0	94.3	44.5	16.8
Luangnamtha	114.7	12.3	3.1	82.9	42.1	17.4
Oudomxay	210.2	13.7	3.0	84.9	45.7	17.3
Bokeo	113.6	18.3	3.0	94.8	42.9	16.8
Luangprabang	364.8	21.6	3.1	89.1	47.4	16.1
Huaphanh	244.7	14.8	3.0	94.1	47.4	16.5
Xayaboury	291.8	17.8	3.0	92.8	44.5	16.9
Xiengkhuang	200.6	12.6	3.1	93.0	51.1	15.4
Vientiane	286.6	18.0	3.0	82.5	43.6	18.8
Bolikhamxay	163.6	11.0	3.1	93.8	45.8	17.3
Khammuane	272.5	16.7	3.1	86.6	44.0	17.6
Savannakhet	671.8	30.9	3.0	85.1	44.2	18.0
Saravane	256.2	24.0	3.0	93.7	45.9	16.2
Sekong	64.2	8.4	3.0	84.5	43.8	17.7
Champasak	501.4	32.5	3.0	87.3	43.3	18.3
Attapeu	87.2	8.5	3.1	94.8	43.5	18.0
Xaysomboun SR	54.1	7.6	2.9	91.5	49.0	16.8
Thailand						
Whole Country						
Northeast Region						
North Region						
Kalasin	921.4	132.6	0.8	79.6	26.5	16.5
Khon Kaen	1,733.4	159.2	0.6	78.3	25.1	17.2
Chanthaburi	480.1	75.7	1.9	67.2	22.8	16.4
Chaiyaphum	1,095.4	85.7	0.9	83.8	25.6	15.3
Chiang Rai	1,129.7	96.7	0.7	82.3	23.7	15.8
Chiang Mai	1,500.1	74.6	0.7	73.5	21.3	16.8
Trad	219.3	77.8	2.9	77.1	24.9	16.0
Yasothon	561.4	134.9	0.5	88.9	27.5	15.2
Nakhon Nayok	241.1	113.6	0.8	87.4	23.6	15.9
Nakhon Phanom	684.4	124.1	0.9	86.2	27.5	17.6
Nakhon Ratchasima	2,556.3	124.7	0.7	79.0	25.8	16.9
Nan	458.0	39.9	0.9	86.4	24.3	15.7
Buriram	1,493.4	144.7	0.9	86.2	28.2	17.0
Prachinburi	406.7	85.4	1.2	83.2	24.6	17.5

Table 1: Population Indicators I - continued

	Population	Population Density	Population Growth Rate	Rural Population	Age Structure: 0-14	Age Structure: 15-24
	('000)	(per km ²)	(annual %)	(%)	(%)	(%)
Phitsanulok	792.7	73.3	0.4	80.4	23.6	16.2
Phetchabun	965.8	76.2	1.0	83.5	24.8	16.5
Maha Sarakham	947.3	179.0	0.7	87.8	25.7	16.0
Roi Et	1,256.5	151.4	1.1	87.8	27.0	15.9
Lampang	782.2	62.4	0.7	71.2	21.4	13.8
Loei	607.1	53.1	1.2	83.0	24.7	16.3
Si Saket	1,405.5	159.0	0.9	89.4	29.0	15.7
Sakon Nakhon	1,040.8	108.4	0.9	86.0	27.0	18.5
Surin	1,327.9	163.5	0.8	92.1	29.3	16.1
Nong Khai	883.7	120.5	1.0	79.2	27.0	18.2
Udon Thani	1,467.2	125.1	0.9	72.8	27.0	18.2
Uttaradit			0.5			
Ubon Ratchathani	1,691.4	107.4	0.9	84.1	28.8	16.8
Phayao			0.6			
Mukdahan	310.7	71.6	1.6	84.9	28.1	17.2
Sa Kaeo	485.6	67.5		85.3	28.7	16.0
Nong Bua Lamphu	482.2	125.0		77.1	27.8	17.7
Amnat Charoen	359.4	113.7		82.1	28.6	15.6
Viet Nam						
Whole Country						
Mekong Delta						
Central Highlands						
Lai Chau	587.6	34.7	2.5	88.0	43.4	19.8
Son La	882.1	62.8	2.0	88.9	41.1	20.2
Nghe An	2,858.7	173.4	1.3	89.9	37.5	18.3
Ha Tinh	1,269.0	209.5	0.4	90.6	37.0	16.7
Quang Binh	794.9	98.7	1.8	87.5	37.8	18.6
Quang Tri	572.9	120.7	1.9	76.6	37.4	17.4
Thua Thien Hue	1,044.9	206.7	1.3	70.7	36.0	18.9
Quang Nam	1,373.7	132.0	1.2	85.2	34.4	17.6
Khanh Hoa	1,031.4	198.5	1.9	63.5	33.8	19.6
Kon Tum	314.2	32.7	2.9	68.2	42.0	19.0
Gia Lai	967.0	62.4	3.4	74.8	40.9	19.3
Dak Lak	1,780.7	90.9	5.0	79.0	41.9	18.3
Lam Dong	998.0	102.2	3.7	61.4	37.3	19.0
Binh Phuoc	653.9	95.4	3.8	84.6	37.8	19.2
Long An	1,305.7	290.7	1.2	83.8	31.0	21.0
Dong Thap	1,566.6	483.8	1.3	85.7	31.9	21.5
An Giang	2,044.4	600.2	1.1	78.4	32.0	21.9
Tien Giang	1,604.2	677.7	0.4	87.0	29.9	20.8
Vinh Long	1,010.5	685.1	0.2	85.8	29.2	21.8
Ben Tre	1,299.0	561.1	0.3	91.7	29.5	20.7
Kien Giang	1,497.6	238.9	1.9	78.0	35.8	21.4
Can Tho	1,809.4	606.0	0.8	78.3	30.8	22.6
Tra Vinh	966.9	434.4	0.9	87.2	32.6	22.2
Soc Trang	1,172.4	363.8	0.6	82.2	33.2	22.0
Bac Lieu	735.1	291.6	0.8	75.5	33.1	23.2
Ca Mau	1,118.8	215.4	1.7	81.4	35.7	21.6
Sources						
Cambodia	Population Census 1998: PopMap	Population Census 1998: PopMap	Population Census 1998	Population Census 1998: PopMap	Population Census 1998: Table A1	Population Census 1998: Table A1
Lao PDR	Population Census 1995: Table 2.1	Population Census 1995: Table 2.3	Statistical Yearbook 2001: Table 25	Population Census 1995: Table 2.2	Population Census 1995: Table 1C	Population Census 1995: Table 1C
Thailand	Population Census 2000: Key Ind.	Population Census 2000: Key Ind.	Population Census 2000: Prelim. Results Table 2	Population Census 2000: Key Ind.	Population Census 2000: Table 2	Population Census 2000: Table 2
Viet Nam	Population Census 1999: Table 1.5	Population Census 1999: Table 1.5	Viet Nam Human Development Report 2001: Table 5	Population Census 1999: Table 1.1	Population Census 1999: Table 1.5	Population Census 1999: Table 1.5

Appendix 2: Data Tables

Table 2: Population Indicators II

	Age Structure: 25-64	Age Structure: 65+	Dependency Ratio	Child Dependency Ratio	Gender Ratio	Child Gender Ratio	Youth Gender Ratio
	(%)	(%)					
Cambodia							
Whole Country							
Banteay Meanchey	35.3	2.5	88.2	83.4	96.2	104.9	97.9
Battambang	35.3	3.2	90.6	84.5	96.1	104.9	100.9
Kampong Cham	34.8	4.2	86.3	78.4	93.1	105.1	94.9
Kampong Chhnang	35.7	3.7	92.8	85.7	89.9	103.2	96.0
Kampong Speu	33.9	3.3	95.1	88.7	92.3	103.6	99.2
Kampong Thom	33.5	3.6	91.6	84.8	92.1	103.9	94.6
Kampot	34.5	3.5	93.8	87.0	91.9	104.8	94.8
Kandal	35.7	4.4	86.6	78.4	92.3	105.0	98.4
Koh Kong	40.4	1.8	74.1	70.8	105.1	102.6	98.5
Kratie	35.6	3.8	81.7	74.8	98.0	104.8	98.9
Mondul Kiri	37.2	2.2	85.3	81.1	102.2	103.7	95.8
Phnom Penh	41.2	2.8	56.1	51.7	93.1	104.4	86.5
Preah Vihear	33.6	3.0	90.8	85.2	99.0	103.9	96.9
Prey Veng	34.5	3.8	86.9	79.9	88.9	104.1	92.0
Pursat	34.6	2.8	100.1	94.5	92.2	102.9	96.8
Ratana Kiri	35.7	3.5	91.9	85.1	97.0	103.7	89.0
Siem Reap	33.7	2.5	91.7	86.9	93.7	104.3	95.5
Sihanouk Ville	37.1	2.3	83.1	78.9	97.7	104.7	92.1
Stung Treng	35.1	3.1	87.9	82.1	98.0	105.0	94.2
Svay Rieng	35.0	3.2	92.4	86.2	88.9	104.1	92.8
Takeo	34.7	3.9	92.8	85.2	91.2	105.2	97.6
Otdar Meanchey	33.9	2.2	101.5	97.2	102.0	104.2	98.4
Krong Kep	33.6	3.6	99.1	91.8	95.7	107.4	96.9
Krong Pailin	43.2	1.2	70.9	68.9	117.9	101.6	100.7
Lao PDR							
Whole Country							
Vientiane Municipality	35.9	3.6	70.4	64.2	100.4	103.9	93.5
Phongsaly	35.1	3.6	92.8	85.8	98.6	104.2	100.9
Luangnamtha	37.4	3.1	82.3	76.7	95.5	101.3	99.0
Oudomxay	34.2	2.8	94.2	88.7	98.5	102.4	98.4
Bokeo	37.1	3.3	85.6	79.6	97.8	102.9	93.1
Luangprabang	32.9	3.6	103.8	96.5	98.2	104.2	90.7
Huaphanh	32.1	3.9	105.6	97.5	98.9	103.9	94.2
Xayaboury	34.7	4.0	94.0	86.3	100.0	104.0	92.0
Xiengkhuang	29.2	4.4	124.6	114.8	99.1	104.0	93.3
Vientiane	33.6	4.0	90.8	83.2	102.3	103.5	100.3
Bolikhamxay	33.0	3.8	98.6	91.1	100.0	103.7	91.0
Khammuane	35.0	3.5	90.3	83.7	94.4	102.6	83.2
Savannakhet	34.1	3.7	91.9	84.8	96.0	103.7	91.2
Saravane	34.3	3.6	98.0	90.8	93.8	102.9	84.8
Sekong	34.6	3.9	91.2	83.7	97.0	101.5	93.7
Champasak	34.1	4.3	90.8	82.6	95.3	104.1	88.6
Attapeu	34.8	3.8	89.6	82.4	94.1	103.1	91.4
Xaysomboun SR	31.1	3.2	108.9	102.3	101.5	105.3	100.6
Thailand							
Whole Country							
Northeast Region							
North Region							
Kalasin	51.9	5.1	46.2	38.7	99.0	105.3	106.7
Khon Kaen	52.1	5.5	44.2	36.2	99.1	106.4	106.7
Chanthaburi	54.2	6.6	41.7	32.3	97.4	104.8	98.9
Chaiyaphum	52.6	6.5	47.4	37.7	98.4	105.8	107.0
Chiang Rai	53.6	6.8	44.0	34.1	100.7	105.4	103.9
Chiang Mai	53.8	8.0	41.6	30.2	97.8	104.8	100.4
Trad	52.9	6.3	45.3	36.1	99.3	102.1	102.3
Yasothon	50.9	6.3	51.1	41.6	99.2	107.4	108.8
Nakhon Nayok	51.7	8.8	47.8	34.9	97.3	108.0	114.1
Nakhon Phanom	49.5	5.4	49.0	41.0	99.0	104.2	107.0
Nakhon Ratchasima	50.7	6.6	47.9	38.2	97.0	106.3	102.4
Nan	53.0	7.0	45.5	35.4	101.7	104.2	108.6
Buriram	49.0	5.8	51.4	42.7	99.5	106.7	109.1

Appendix 2: Data Tables

Table 2: Population Indicators II - continued

	Age Structure: 25-64	Age Structure: 65+	Dependency Ratio	Child Dependency Ratio	Sex Ratio	Child Sex Ratio	Youth Sex Ratio
	(%)	(%)					
Prachinburi	50.5	7.4	47.0	36.2	98.1	106.9	106.6
Phitsanulok	53.3	6.9	44.0	34.0	97.1	106.0	109.0
Phetchabun	52.0	6.8	46.1	36.2	98.7	105.8	107.4
Maha Sarakham	52.9	5.3	45.0	37.3	97.1	106.5	105.6
Roi Et	51.3	5.8	48.8	40.2	98.5	106.5	110.2
Lampang	56.1	8.7	43.1	30.6	99.6	105.7	105.2
Loei	52.8	6.2	44.8	35.7	101.9	106.0	104.7
Si Saket	49.4	5.9	53.8	44.5	98.2	105.4	108.9
Sakon Nakhon	50.0	4.5	46.1	39.4	99.3	104.0	106.1
Surin	48.1	6.5	55.7	45.6	98.9	106.8	111.7
Nong Khai	49.6	5.2	47.6	39.8	101.7	106.6	106.8
Udon Thani	50.3	4.5	46.0	39.4	100.8	106.7	106.5
Uttaradit							
Ubon Ratchathani	48.5	5.9	53.2	44.1	100.3	106.3	107.7
Phayao							
Mukdahan	49.3	5.4	50.4	42.3	100.6	103.8	104.7
Sa Kaeo	50.1	5.2	51.4	43.4	101.0	106.2	109.9
Nong Bua Lamphu	49.9	4.7	47.9	41.1	100.2	105.6	105.0
Amnat Charoen	50.0	5.8	52.4	43.6	100.4	108.0	105.0
Viet Nam							
Whole Country							
Mekong Delta							
Central Highlands							
Lai Chau	33.1	3.7	89.1	82.0	101.8	104.9	102.3
Son La	34.4	4.3	83.2	75.3	100.8	103.9	100.3
Nghe An	37.9	6.3	77.9	66.7	96.7	105.0	98.5
Ha Tinh	38.4	7.9	81.4	67.2	96.0	105.7	99.6
Quang Binh	37.3	6.3	78.9	67.6	97.6	104.5	99.7
Quang Tri	38.6	6.6	78.5	66.8	96.6	105.8	103.7
Thua Thien Hue	38.5	6.6	74.3	62.7	97.1	106.5	105.4
Quang Nam	40.5	7.5	72.2	59.2	93.8	107.0	104.7
Khanh Hoa	41.5	5.1	63.6	55.3	97.6	105.9	104.1
Kon Tum	35.5	3.4	83.3	77.1	101.0	104.6	104.4
Gia Lai	36.3	3.5	79.9	73.6	101.8	104.7	104.9
Dak Lak	36.6	3.3	82.3	76.3	103.4	105.4	106.0
Lam Dong	39.8	3.8	69.9	63.4	101.7	105.3	103.6
Binh Phuoc	39.9	3.1	69.1	64.0	104.4	106.4	108.2
Long An	42.5	5.5	57.5	48.8	96.0	106.0	102.3
Dong Thap	41.2	5.4	59.5	50.9	96.3	106.4	97.6
An Giang	40.8	5.3	59.5	51.0	96.5	107.0	97.7
Tien Giang	43.4	5.8	55.7	46.6	93.7	105.9	99.1
Vinh Long	43.1	5.8	54.0	45.0	94.3	105.6	99.9
Ben Tre	43.6	6.1	55.5	45.9	93.9	105.6	101.4
Kien Giang	38.6	4.2	66.7	59.7	97.3	106.7	94.9
Can Tho	41.5	5.1	56.0	48.0	95.9	106.4	97.1
Tra Vinh	40.1	5.0	60.3	52.3	94.2	105.8	99.8
Soc Trang	39.8	5.0	61.8	53.7	95.0	105.5	96.9
Bac Lieu	39.1	4.7	60.7	53.1	94.9	105.3	94.7
Ca Mau	38.8	3.8	65.5	59.1	97.4	105.5	90.5
Sources							
Cambodia	Population Census 1998: Table A1	Population Census 1998: Table A1	Population Census 1998: PopMap	Population Census 1998: PopMap	Population Census 1998: PopMap	Population Census 1998: PopMap	Population Census 1998: PopMap
Lao PDR	Population Census 1995: Table 1C	Population Census 1995: Table 1C	Population Census 1995: Table 1C	Population Census 1995: Table 1C	Population Census 1995: Table 1C	Population Census 1995: Table 1C	Population Census 1995: Table 1C
Thailand	Population Census 2000: Table 2	Population Census 2000: Table 2	Population Census 2000: Table 2	Population Census 2000: Table 2	Population Census 2000: Key Ind.	Population Census 2000: Key Ind.	Population Census 2000: Key Ind.
Viet Nam	Population Census 1999: Table 1.5	Population Census 1999: Table 1.5	Population Census 1999: Table 1.5	Population Census 1999: Table 1.5	Population Census 1999: Table 1.5	Population Census 1999: Table 1.5	Population Census 1999: Table 1.5

Appendix 2: Data Tables

Table 3: Population Indicators III

	Adult Sex Ratio	Elderly Sex Ratio	Household Size	Female Household Heads	Ethnic Minorities	Migrant Population
			(Persons)	(%)	(%)	(%)
Cambodia						
Whole Country						
Banteay Meanchey	87.8	67.9	5.1	21.6		7.2
Battambang	86.6	66.9	5.3	29.0		3.6
Kampong Cham	81.3	77.8	5.1	21.7		1.7
Kampong Chhnang	75.9	63.8	5.0	26.8		3.9
Kampong Speu	78.4	67.0	5.1	25.6		2.6
Kampong Thom	78.9	76.0	5.3	28.8		1.3
Kampot	79.2	63.4	5.0	24.5		1.4
Kandal	78.8	73.6	5.2	25.4		3.9
Koh Kong	112.9	69.0	5.2	25.3		24.0
Kratie	92.3	79.4	5.3	18.3		4.5
Mondul Kiri	103.1	107.7	5.7	22.0		7.6
Phnom Penh	91.1	58.2	5.7	28.7		15.7
Preah Vihear	96.3	75.3	5.5	18.7		3.6
Prey Veng	72.3	80.3	4.9	31.2		1.0
Pursat	80.1	61.1	5.2	24.2		2.8
Ratana Kiri	92.3	102.6	5.6	12.5		5.0
Siem Reap	82.0	67.8	5.4	27.6		1.8
Sihanouk Ville	95.7	58.4	5.5	22.5		14.5
Stung Treng	93.8	75.6	5.6	16.8		4.4
Svay Rieng	72.5	71.0	4.8	27.5		1.2
Takeo	75.6	70.8	5.1	26.5		1.4
Otdar Meanchey	103.8	61.1	5.3	23.1		8.7
Krong Kep	86.0	54.9	5.3	26.8		11.2
Krong Pailin	145.2	79.3	5.2	32.5		34.8
Lao PDR						
Whole Country						
Vientiane Municipality	102.4	92.0	5.7	14.4	7.4	
Phongsaly	94.5	68.0	6.0	7.1	95.7	
Luangnamtha	90.1	69.8	5.5	10.0	97.7	
Oudomxay	95.7	75.9	6.3	7.1	90.9	
Bokeo	96.5	75.3	5.7	10.4	86.6	
Luangprabang	94.4	91.8	6.1	7.8	71.4	
Huaphanh	95.8	87.1	6.8	4.8	70.0	
Xayaboury	100.0	91.8	5.9	7.7	81.0	
Xiengkhuang	95.2	91.7	6.8	7.2	55.7	
Vientiane	101.6	105.1	6.0	7.9	59.8	
Bolikhamxay	100.2	97.3	6.1	8.7	59.8	
Khammuane	90.5	94.1	5.5	16.1	40.6	
Savannakhet	89.7	93.0	6.3	14.3	42.5	
Saravane	86.1	102.4	6.0	12.7	40.0	
Sekong	91.6	112.1	6.7	8.0	91.4	
Champasak	88.6	94.8	5.9	13.5	15.2	
Attapeu	85.8	88.9	5.7	11.7	63.1	
Xaysomboun SR	96.9	96.1	6.4	7.8	80.6	
Thailand						
Whole Country						
Northeast Region						
North Region						
Kalasin	95.8	79.3	4.1	23.6	0.1	2.0
Khon Kaen	96.0	78.0	4.0	22.3	0.1	4.5
Chanthaburi	95.8	83.4	3.6	29.4	3.6	7.2
Chaiyaphum	95.3	78.2	3.9	23.4	0.1	2.5
Chiang Rai	98.9	92.5	3.5	20.5	12.8	3.8
Chiang Mai	95.3	91.7	3.4	23.9	19.4	7.9
Trad	98.8	85.8	3.6	26.9	5.2	6.5
Yasothon	95.6	75.4	4.0	25.1	0.1	3.2
Nakhon Nayok	92.5	73.8	3.4	32.8	5.9	6.5
Nakhon Phanom	96.1	78.0	4.1	25.1	0.3	2.5
Nakhon Ratchasima	93.9	75.8	3.9	26.5	0.3	4.8
Nan	100.3	89.2	3.8	16.9	11.5	2.5
Buriram	95.2	78.7	4.2	23.1	27.8	2.0

Appendix 2: Data Tables

Table 3: Population Indicators III - continued

	Adult Gender Ratio	Elderly Gender Ratio	Household Size	Female Household Heads	Ethnic Minorities	Migrant Population
			(Persons)	(%)	(%)	(%)
Prachinburi	94.5	77.8	3.6	29.4	0.8	8.0
Phitsanulok	93.3	74.9	3.5	26.0	1.1	4.7
Phetchabun	94.9	83.8	3.9	23.1	1.3	2.5
Maha Sarakham	93.3	72.0	4.1	26.6	0.4	2.3
Roi Et	94.4	72.3	4.1	26.8	0.6	3.0
Lampang	98.6	84.1	3.5	20.9	1.9	3.5
Loei	100.1	93.9	3.9	18.1	0.5	3.5
Si Saket	94.2	74.6	4.2	25.7	26.3	2.1
Sakon Nakhon	96.4	79.6	4.2	24.0	0.2	2.5
Surin	93.5	78.0	4.1	24.2	47.3	2.5
Nong Khai	98.8	87.6	4.2	22.2	0.1	3.5
Udon Thani	97.5	83.9	4.1	24.1	0.1	3.0
Uttaradit						
Ubon Ratchathani	96.4	85.0	4.2	22.1	0.4	2.3
Phayao						
Mukdahan	99.1	85.5	4.0	18.6	0.9	3.2
Sa Kaeo	97.2	85.6	3.6	25.4	2.4	3.7
Nong Bua Lamphu	97.8	78.5	4.3	21.9	0.0	1.8
Amnat Charoen	97.7	77.7	4.2	21.9	0.1	3.2
Viet Nam						
Whole Country						
Mekong Delta						
Central Highlands						
Lai Chau	100.2	79.5	5.7		83.1	1.9
Son La	99.4	86.0	5.4		82.6	1.0
Nghe An	92.5	73.1	4.6		13.3	0.8
Ha Tinh	89.8	77.9	4.3		0.1	0.8
Quang Binh	93.1	80.6	4.6		1.9	0.9
Quang Tri	91.2	66.5	4.7		9.1	1.6
Thua Thien Hue	91.6	64.7	5.1		3.7	2.2
Quang Nam	85.8	63.4	4.4		6.8	1.1
Khanh Hoa	92.3	69.8	4.9		4.6	3.0
Kon Tum	97.3	79.4	4.9		53.6	7.4
Gia Lai	99.4	79.1	5.0		43.6	8.2
Dak Lak	102.6	75.4	5.1		29.8	11.5
Lam Dong	100.6	74.2	4.7		22.9	9.0
Binh Phuoc	103.3	76.0	4.6		19.3	12.6
Long An	91.0	64.8	4.6		0.3	2.3
Dong Thap	90.7	79.4	4.7		0.2	1.6
An Giang	90.1	83.1	4.9		5.1	1.2
Tien Giang	88.2	63.9	4.5		0.4	1.4
Vinh Long	88.2	71.0	4.7		2.7	1.5
Ben Tre	89.2	59.2	4.3		0.4	1.1
Kien Giang	92.1	83.4	5.0		14.4	2.1
Can Tho	90.2	79.6	4.9		3.3	2.3
Tra Vinh	87.2	63.0	4.7		31.2	1.1
Soc Trang	88.3	77.1	5.0		34.7	1.1
Bac Lieu	89.1	78.3	5.1		11.0	1.7
Ca Mau	96.2	80.5	5.1		2.8	1.6
Sources						
Cambodia	Population Census 1998: PopMap	Population Census 1998: PopMap	Population Census 1998: PopMap	Population Census 1998: PopMap		Population Census 1998: Table C4
Lao PDR	Population Census 1995: Table 1C	Population Census 1995: Table 1C	Population Census 1995: Table 3.1	Population Census 1995: Table 3B1	Lao National Construction Front 1999	
Thailand	Population Census 2000: Key Ind.	Population Census 2000: Key Ind.	Population Census 2000: Key Ind.	Population Census 2000: Key Ind.	Population Census 2000: Key Ind.	Population Census 2000: Key Ind.
Viet Nam	Population Census 1999: Table 1.5	Population Census 1999: Table 1.5	Population Census 1999: Table 1.3		Population Census 1999: Table 1.6	Population Census 1999: Table 2.1

Appendix 2: Data Tables

Table 4: Labour Force Indicators

	Labour Force Participation Rate	Female Labour Force Participation	Agricultural Employment	Industrial Employment	Services Employment	Unemployment
	(%)	(%)	(%)	(%)	(%)	(%)
Cambodia						
Whole Country						
Banteay Meanchey	72.0	67.7	75.3	3.1	21.6	8.0
Battambang	66.2	60.2	71.0	4.1	25.0	8.0
Kampong Cham	71.2	68.4	85.4	2.8	11.8	4.3
Kampong Chhnang	76.4	75.9	85.5	1.7	12.8	3.1
Kampong Speu	74.7	76.2	89.5	1.1	9.4	2.8
Kampong Thom	67.1	62.1	86.4	1.8	11.8	8.2
Kampot	74.1	74.3	87.7	1.7	10.7	3.7
Kandal	70.2	68.0	76.8	6.2	17.0	4.9
Koh Kong	66.1	48.8	53.2	7.4	39.4	9.3
Kratie	68.3	61.4	78.3	4.2	17.5	6.9
Mondul Kiri	78.2	72.3	75.6	5.0	19.4	7.4
Phnom Penh	58.7	50.1	10.0	22.2	67.9	12.6
Preah Vihear	78.8	76.8	83.7	1.0	15.3	2.6
Prey Veng	76.6	78.5	90.4	1.2	8.4	3.0
Pursat	74.2	73.6	82.6	2.1	15.3	3.5
Ratana Kiri	84.8	82.7	88.6	1.4	10.0	3.0
Siem Reap	76.0	73.2	82.4	2.4	15.1	4.6
Sihanouk Ville	63.3	51.9	50.8	11.4	37.9	8.3
Stung Treng	79.7	77.0	79.4	2.4	18.1	2.7
Svay Rieng	76.7	79.2	90.5	0.8	8.7	2.1
Takeo	73.3	74.4	90.1	1.7	8.2	3.5
Otdar Meanchey	75.1	70.3	79.1	1.1	19.9	4.5
Krong Kep	72.5	70.2	82.2	2.2	15.7	2.0
Krong Pailin	74.6	60.5	50.5	8.6	41.0	5.0
Lao PDR						
Whole Country			78.0	6.0	16.0	
Vientiane Municipality	59.6	57.2				7.2
Phongsaly	75.8	76.2				1.0
Luangnamtha	76.4	76.6				0.7
Oudomxay	76.9	78.4				2.1
Bokeo	77.0	78.4				1.5
Luangprabang	69.6	71.9				1.7
Huaphanh	72.3	74.6				1.4
Xayaboury	68.2	68.5				1.4
Xiengkhuang	65.9	68.5				1.9
Vientiane	62.2	61.6				3.5
Bolikhamxay	69.5	70.2				2.7
Khammuane	75.1	76.6				2.2
Savannakhet	73.7	74.2				1.9
Saravane	79.4	81.5				0.6
Sekong	82.1	82.4				0.9
Champasak	69.3	71.2				2.6
Attapeu	72.3	73.6				1.9
Xaysomboun SR	71.3	73.5				1.6
Thailand						
Whole Country						
Northeast Region						
North Region						
Kalasin	68.7	58.2	73.4	8.6	18.0	3.3
Khon Kaen	68.4	59.8	53.4	16.5	30.1	4.1
Chanthaburi						
Chaiyaphum	70.8	63.0	70.4	6.8	22.9	1.2
Chiang Rai						
Chiang Mai						
Trad						
Yasothon	76.9	69.3	80.3	7.0	12.7	0.7
Nakhon Nayok						
Nakhon Phanom	52.7	37.3	64.0	8.8	27.2	9.2
Nakhon Ratchasima	71.4	64.1	57.4	15.5	27.1	1.2
Nan						
Buriram	72.8	66.8	79.4	6.5	14.1	4.2

Appendix 2: Data Tables

Table 4: Labour Force Indicators - continued

	Labour Force Participation Rate	Female Labour Force Participation	Agricultural Employment	Industrial Employment	Services Employment	Unemployment
	(%)	(%)	(%)	(%)	(%)	(%)
Prachinburi						
Phitsanulok						
Phetchabun						
Maha Sarakham	74.1	68.5	73.8	5.9	20.3	3.3
Roi Et	78.9	73.5	83.5	3.7	12.8	0.6
Lampang						
Loei	71.0	62.8	71.1	3.9	25.1	4.7
Si Saket	77.9	73.4	80.2	4.4	15.4	4.9
Sakon Nakhon	61.8	45.0	63.6	14.9	21.5	17.8
Surin	62.5	51.9	73.3	6.2	20.6	0.5
Nong Khai	66.1	54.9	59.4	18.7	21.9	17.5
Udon Thani	63.1	50.0	56.2	14.5	29.3	11.2
Uttaradit						
Ubon Ratchathani	64.5	55.1	63.3	11.0	25.6	0.9
Phayao						
Mukdahan	81.8	74.8	73.1	6.5	20.4	4.7
Sa Kaeo						
Nong Bua Lamphu	74.2	68.6	63.9	15.2	21.0	29.7
Amnat Charoen	73.7	65.2	69.4	10.7	19.9	2.2
Viet Nam						
Whole Country						
Mekong Delta						
Central Highlands						
Lai Chau	79.4	79.8	87.0	2.5	10.4	1.3
Son La	77.7	78.7	88.4	2.9	8.8	1.2
Nghe An	68.1	67.5	80.1	6.3	13.6	3.3
Ha Tinh	67.7	66.6	83.0	5.8	11.2	2.5
Quang Binh	69.8	67.0	77.3	7.9	14.8	4.0
Quang Tri	67.1	62.1	70.7	9.0	20.3	5.3
Thua Thien Hue	65.3	58.5	49.2	22.1	28.7	5.5
Quang Nam	72.1	69.0	75.7	9.4	14.9	3.4
Khanh Hoa	66.6	55.5	50.3	18.8	30.9	9.3
Kon Tum	76.9	75.8	75.9	6.2	17.9	1.4
Gia Lai	78.6	76.0	80.1	6.0	13.9	2.0
Dak Lak	73.9	68.0	84.7	3.5	11.8	1.7
Lam Dong	73.9	68.5	75.8	7.3	16.8	1.9
Binh Phuoc	73.8	64.9	81.5	4.8	13.7	3.7
Long An	73.4	65.7	69.5	12.5	18.0	4.6
Dong Thap	72.9	62.8	72.5	8.7	18.8	5.0
An Giang	69.7	56.6	62.5	10.9	26.6	5.2
Tien Giang	74.7	67.8	71.2	9.8	19.1	3.9
Vinh Long	72.2	65.3	71.6	9.0	19.4	3.5
Ben Tre	68.7	57.5	72.7	9.8	17.5	5.5
Kien Giang	70.3	59.0	75.2	7.2	17.6	4.3
Can Tho	68.9	57.3	65.8	10.8	23.4	7.7
Tra Vinh	69.8	61.6	75.7	7.0	17.3	4.0
Soc Trang	72.1	63.2	80.0	5.3	14.7	3.5
Bac Lieu	60.4	44.2	73.6	7.5	18.9	4.1
Ca Mau	66.3	52.0	76.5	7.9	15.6	8.2
Sources						
Cambodia	Population Census 1998: Table B1	Population Census 1998: Table B1	Population Census 1998: PopMap	Population Census 1998: PopMap	Population Census 1998: PopMap	Population Census 1998: Table B1
Lao PDR	Population Census 1995: Table 5.3	Population Census 1995: Table 5.3	UNDP Lao Social Database	UNDP Lao Social Database	UNDP Lao Social Database	Population Census 1995: Table 5.5
Thailand	Northeast Regional Statistics 2000: Table 1.11	Northeast Regional Statistics 2000: Table 1.11	Northeast Regional Statistics 2000: Table 1.15	Northeast Regional Statistics 2000: Table 1.15	Northeast Regional Statistics 2000: Table 1.15	Northeast Regional Statistics 2000: Table 1.11
Viet Nam	Population Census 1999: Table 5.3	Population Census 1999: Table 5.3	Population Census 1999: Table 5.7	Population Census 1999: Table 5.7	Population Census 1999: Table 5.7	Population Census 1999: Table 5.3

Appendix 2: Data Tables

Table 5: Living Standards Indicators

	GDP per capita	Poverty Rate	Poverty Gap	Access to Safe Water	Access to Sanitation	Access to Electricity
	(\$PPP)	(%)	(%)	(%)	(%)	(%)
Cambodia						
Whole Country	1,361					
Banteay Meanchey		40.9	12.8	19.2	17.1	12.1
Battambang		26.4	7.3	21.6	36.9	13.9
Kampong Cham		12.1	3.1	19.3	14.8	11.7
Kampong Chhnang		44.6	12.5	19.3	6.0	6.0
Kampong Speu		18.2	4.3	22.4	9.2	4.0
Kampong Thom		29.1	7.9	3.7	20.0	6.7
Kampot		18.7	4.7	13.2	22.5	6.8
Kandal		18.4	4.6	36.2	16.0	12.8
Koh Kong		8.2	2.5	36.3	29.3	38.8
Kratie		38.6	11.7	32.8	18.4	13.4
Mondul Kiri		19.9	5.6	7.6	21.0	8.5
Phnom Penh		11.9	2.9	85.4	87.9	80.2
Preah Vihear		29.1	7.3	17.7	18.4	3.7
Prey Veng		53.1	15.9	54.5	2.5	3.9
Pursat		40.7	11.8	12.3	11.7	9.7
Ratana Kiri		8.8	2.9	5.5	21.0	14.9
Siem Reap		53.7	19.1	13.4	10.7	9.4
Sihanouk Ville		34.1	10.7	27.8	22.5	41.6
Stung Treng		16.4	3.9	19.3	18.4	14.1
Svay Rieng		43.5	11.8	48.2	14.2	4.7
Takeo		15.2	4.3	13.0	8.3	4.6
Otdar Meanchey		39.1	13.6	3.2	10.7	2.6
Krong Kep		49.0	17.7	12.4	22.5	9.2
Krong Pailin		97.2	61.9	13.1	36.9	23.2
Lao PDR						
Whole Country	1,471					
Vientiane Municipality		13.5	2.8	89.0	70.0	100.0
Phongsaly		57.9	17.0	27.0	12.0	5.0
Luangnamtha		51.1	14.4	27.0	29.0	7.0
Oudomxay		66.1	24.7	32.0	16.0	14.0
Bokeo		38.9	9.5	45.0	18.0	8.0
Luangprabang		40.8	9.8	37.0	25.0	19.0
Huaphanh		71.3	23.4	23.0	36.0	16.0
Xayaboury		17.7	3.1	33.0	70.0	15.0
Xiengkhuang		42.9	11.9	37.0	44.0	18.0
Vientiane		27.8	5.7	61.0	45.0	53.0
Bolikhamxay		27.9	7.4	65.0	22.0	34.0
Khammuane		44.5	11.3	38.0	14.0	33.0
Savannakhet		41.9	9.8	66.0	11.0	32.0
Saravane		39.2	10.0	39.0	4.0	15.0
Sekong		49.7	15.0	43.0	14.0	10.0
Champasak		37.4	9.0	58.0	14.0	20.0
Attapeu		48.0	12.1	30.0	11.0	11.0
Xaysomboun SR		62.8	19.9	39.0	19.0	8.0
Thailand						
Whole Country			3.0			
Northeast Region						
North Region						
Kalasin	1,691	39.9		84.3	98.1	95.3
Khon Kaen	3,129	17.2		98.2	99.2	94.4
Chanthaburi	4,038	7.4		95.3	98.5	82.4
Chaiyaphum	2,058	16.4		99.1	98.2	87.3
Chiang Rai	2,272	10.3		85.3	97.4	92.3
Chiang Mai	4,397	5.2		85.3	96.2	89.9
Trad	5,934	15.0		91.8	97.5	87.7
Yasothon	1,567	50.3		93.7	98.6	91.3
Nakhon Nayok	2,923	4.8		96.4	99.6	91.6
Nakhon Phanom	1,577	48.1		81.1	99.0	85.6
Nakhon Ratchasima	2,863	21.3		99.2	98.3	84.5
Nan	2,232	19.3		71.9	98.6	90.3
Buriram	1,751	25.8		92.4	96.5	82.2
Prachinburi	4,162	2.2		94.0	98.5	84.8

Appendix 2: Data Tables

Table 5: Living Standards Indicators - continued

	GDP per capita	Poverty Rate	Poverty Gap	Access to Safe Water	Access to Sanitation	Access to Electricity
	(\$PPP)	(%)	(%)	(%)	(%)	(%)
Phitsanulok	3,190	14.5		93.2	98.9	86.3
Phetchabun	2,256	13.0		93.8	98.1	84.6
Maha Sarakham	1,734	13.1		98.0	99.5	96.7
Roi Et	1,741	22.2		93.3	99.0	95.5
Lampang	3,283	12.8		89.6	99.7	92.7
Loei	2,073	36.8		97.4	99.0	87.0
Si Saket	1,553	26.5		76.3	95.1	86.2
Sakon Nakhon	1,724	40.5		86.0	97.7	91.0
Surin	1,565	41.0		75.8	91.5	82.3
Nong Khai	1,943	35.9		86.9	98.2	83.3
Udon Thani	2,056	34.5		91.7	99.1	93.5
Uttaradit	3,092	9.7				87.7
Ubon Ratchathani	1,741	18.1		81.2	96.3	85.8
Phayao	2,220	9.6				96.8
Mukdahan	2,384	24.1		79.0	96.1	85.5
Sa Kaeo	2,730	22.9		97.6	98.4	
Nong Bua Lamphu	1,327	50.0		98.6	99.2	
Amnat Charoen	1,413	21.6		89.5	98.4	
Viet Nam						
Whole Country						
Mekong Delta			8.1			
Central Highlands			19.1			
Lai Chau	658	77.7		23.3	42.6	30.9
Son La	649	71.4		31.3	78.1	47.7
Nghe An	940	47.7		87.3	80.2	90.9
Ha Tinh	874	44.5		90.5	85.3	92.4
Quang Binh	876	49.1		73.0	86.0	82.0
Quang Tri	940	52.0		77.3	73.9	78.5
Thua Thien Hue	1,033	47.2		90.4	68.3	74.5
Quang Nam	955	40.8		89.2	56.1	78.0
Khanh Hoa	1,870	31.1		88.9	61.8	92.2
Kon Tum	845	52.2		69.2	62.7	55.2
Gia Lai	917	53.8		58.3	45.4	54.0
Dak Lak	1,248	39.5		91.8	85.7	52.0
Lam Dong	1,023	33.7		87.2	84.2	68.5
Binh Phuoc	861	17.9		89.7	85.6	29.4
Long An	1,589	30.5		66.6	82.4	74.7
Dong Thap	1,161	39.1		13.4	96.0	60.2
An Giang	1,602	40.6		27.3	79.9	66.7
Tien Giang	1,461	27.6		51.8	98.7	85.0
Vinh Long	1,506	33.0		16.5	99.3	48.1
Ben Tre	1,410	32.5		20.1	97.4	52.7
Kien Giang	1,660	38.0		62.2	79.0	42.7
Can Tho	1,577	34.9		33.1	99.0	62.0
Tra Vinh	1,500	41.8		53.1	65.0	28.9
Soc Trang	1,443	42.4		69.7	81.1	37.7
Bac Lieu	1,325	37.7		76.0	68.6	28.7
Ca Mau	1,619	34.5		76.2	91.6	29.6
Sources						
Cambodia	UNDP Human Development Report 2002	MOP/WFP Poverty Estimates 2002: Table 7	MOP/WFP Poverty Estimates 2002: Table 7	Population Census 1998: PopMap	Health Survey 2000: Table 14	Population Census 1998: PopMap
Lao PDR	UNDP Human Development Report 2002	Kakwani et al 2002: Table 9	Kakawni et al 2002: Table 10	Expenditure and Consumption Survey 1997/98: Table 16	Population Census 1995: Table 8.7	Expenditure and Consumption Survey 1997/98: Table 22
Thailand	Statistical Yearbook 2001: Table 10.10	NESDB 2002	Thailand Social Monitor	Population Census 2000: Key Ind.	Population Census 2000: Key Ind.	Population Census 1990: Table 10
Viet Nam	Viet Nam Human Development Report 2001: Table 1	Minot and Baulch 2001: Table 6	Viet Nam: Attacking Poverty: Table 1.4	Viet Nam Human Development Report 2001: Table 2	Viet Nam Human Development Report 2001: Table 2	Viet Nam Human Development Report 2001: Table 14

Appendix 2: Data Tables

Table 6: Health Indicators

	Infant Mortality Rate	Child Malnutrition	Male Life Expectancy	Female Life Expectancy	Total Fertility Rate	Malaria Incidence	HIV Prevalence
	(Per 1000)	(%)	(Years)	(Years)	(Children)	(Per 1000)	(%)
Cambodia							
Whole Country			52.0	55.0		*	2.8
Banteay Meanchey	92.0	37.4			5.5	0-5	
Battambang	80.0	38.7			5.7	6-10	
Kampong Cham	79.0	49.6			5.2	0-5	
Kampong Chhnang	91.0	47.6			5.5	0-5	
Kampong Speu	80.0	44.5			6.0	0-5	
Kampong Thom	85.0	48.1			5.9	6-10	
Kampot	74.0	38.5			5.3	0-5	
Kandal	70.0	47.6			5.1	0-5	
Koh Kong	68.0	44.2			5.8	0-5	
Kratie	97.0	47.8			5.6	11-50	
Mondul Kiri	135.0	53.6			7.4	101-200	
Phnom Penh	44.0	37.4			3.7	0-5	
Preah Vihear	117.0	47.8			7.3	11-50	
Prey Veng	75.0	56.9			4.7	0-5	
Pursat	104.0	48.6			6.6	6-10	
Ratana Kiri	169.0	53.6			8.2	51-100	
Siem Reap	76.0	47.2			5.8	11-50	
Sihanouk Ville	79.0	38.5			5.6	0-5	
Stung Treng	122.0	47.8			7.1	51-100	
Svay Rieng	69.0	48.6			4.6	0-5	
Takeo	66.0	43.4			5.1	0-5	
Otdar Meanchey	98.0	47.2			7.1	0-5	
Krong Kep	90.0	38.5			7.0	0-5	
Krong Pailin	71.0	38.7			6.3	101-200	
Lao PDR							
Whole Country		40.0					0.1
Vientiane Municipality	72.0		57.0	59.0	2.4	8.3	
Phongsaly	94.0		55.0	58.0	5.6	11.8	
Luangnamtha	119.0		52.0	55.0	5.4	16.9	
Oudomxay	88.0		55.0	58.0	6.0	29.7	
Bokeo	82.0		51.0	54.0	4.0	37.7	
Luangprabang	132.0		50.0	53.0	4.9	61.9	
Huaphanh	125.0		51.0	53.0	6.9	36.3	
Xayaboury	130.0		49.0	51.0	3.5	123.2	
Xiengkhuang	121.0		52.0	54.0	6.3	19.9	
Vientiane	102.0		52.0	54.0	4.1	55.6	
Bolikhamxay	136.0		48.0	50.0	5.6	72.8	
Khammuane	83.0		54.0	57.0	5.8	112.0	
Savannakhet	80.0		55.0	58.0	5.2	67.4	
Saravane	86.0		54.0	57.0	5.8	98.8	
Sekong	96.0		53.0	56.0	5.6	180.2	
Champasak	91.0		53.0	55.0	5.1	71.1	
Attapeu	93.0		52.0	55.0	5.8	111.7	
Xaysomboun SR	138.0		47.0	50.0	7.3	37.7	
Thailand							
Whole Country			67.0	71.0			1.9
Northeast Region							
North Region							
Kalasin	6.5	12.4			2.0	0.0	
Khon Kaen	10.1	19.0			2.0	0.0	
Chanthaburi	12.2	6.6			1.7	6.5	
Chaiyaphum	2.0	8.2			2.0	0.0	
Chiang Rai	10.8	16.6			1.8	0.8	
Chiang Mai	2.4	11.5			1.6	1.2	
Trad	11.0	4.6			1.8	14.0	
Yasothon	7.3	10.9			2.0	0.0	
Nakhon Nayok	7.8	4.6			1.8	0.1	
Nakhon Phanom	13.1	13.6			2.1	0.5	
Nakhon Ratchasima	6.6	14.1			2.0	0.0	
Nan	11.8	18.1			1.9	0.8	
Buriram	4.1	13.7			2.2	0.0	

* Data for this indicator for Cambodia are in ranges.

Appendix 2: Data Tables

Table 6: Health Indicators - continued

	Infant Mortality Rate	Child Malnutrition	Male Life Expectancy	Female Life Expectancy	Total Fertility Rate	Malaria Incidence	HIV Prevalence
	(Per 1000)	(%)	(Years)	(Years)	(Children)	(Per 1000)	(%)
Prachinburi	3.8	6.6			1.9	0.4	
Phitsanulok	23.0	10.7			1.8	0.2	
Phetchabun	3.0	6.0			2.0	0.1	
Maha Sarakham	1.1	12.3			1.9	0.0	
Roi Et	3.5	12.4			2.1	0.0	
Lampang	14.0	11.1			1.7	0.4	
Loei	15.1	14.0			1.9	0.1	
Si Saket	8.5	10.5			2.2	0.1	
Sakon Nakhon	4.0	11.3			2.1	0.1	
Surin	4.4	12.6			2.3	0.1	
Nong Khai	6.8	8.9			2.1	0.0	
Udon Thani	9.1	10.7			2.0	0.0	
Uttaradit	13.4	10.4				0.4	
Ubon Ratchathani	9.2	12.2			2.2	0.5	
Phayao	10.9	12.1				0.2	
Mukdahan	8.8	16.8			2.1	0.8	
Sa Kaeo	3.8	15.7			2.1	3.3	
Nong Bua Lamphu	48.8	11.2			2.0	0.0	
Amnat Charoen	10.8	14.8			2.2	0.2	
Viet Nam							
Whole Country							0.3
Mekong Delta					2.1		
Central Highlands					3.9		
Lai Chau	64.5	43.2	58.5	67.7		22.9	
Son La	53.3	39.4	65.6	67.4		9.8	
Nghe An	30.7	45.1	63.6	74.0		4.8	
Ha Tinh	30.5	44.2	67.2	75.0		7.0	
Quang Binh	45.5	51.5	62.9	70.5		13.9	
Quang Tri	50.6	39.2	64.7	71.0		10.1	
Thua Thien Hue	30.3	34.7	69.2	72.3		3.6	
Quang Nam	34.2	39.0	68.9	72.6		17.6	
Khanh Hoa	38.3	36.4	67.9	74.5		9.4	
Kon Tum	82.6	44.2	56.8	60.6		53.2	
Gia Lai	73.5	46.7	59.4	65.4		20.0	
Dak Lak	57.3	51.1	62.2	66.3		18.2	
Lam Dong	23.8	34.4	68.6	74.8		10.1	
Binh Phuoc	23.7	41.5	66.4	72.2		20.5	
Long An	24.6	29.9	70.2	74.0		0.4	
Dong Thap	45.7	31.8	67.8	74.5		0.4	
An Giang	32.2	32.8	67.9	73.1		0.2	
Tien Giang	24.9	31.5	67.9	76.8		0.5	
Vinh Long	26.2	33.7	69.6	75.9		0.9	
Ben Tre	40.8	33.7	66.0	75.8		1.0	
Kien Giang	37.4	30.6	69.3	75.8		1.9	
Can Tho	39.2	32.5	68.0	73.7		0.3	
Tra Vinh	37.0	31.8	67.5	74.9		2.4	
Soc Trang	37.8	33.9	67.0	73.0		3.1	
Bac Lieu	38.5	31.9	66.6	73.3		13.5	
Ca Mau	41.0	33.5	68.1	72.8		22.6	
Sources							
Cambodia	Population Census 1998: PopMap	Health Survey 2000: Table 15	ADB Key Ind. 2001: Table 2	ADB Key Ind. 2001: Table 2	Population Census 1998: PopMap	WHO Malaria Report 2000	WHO HIV/AIDS Report 2001: Table 1
Lao PDR	Population Census 1995: Page 66	Human Development Report 2001	Population Census 1995: Page 66	Population Census 1995: Page 66	Health Survey 2000	Ministry of Health 1998	WHO HIV/AIDS Report 2001: Table 1
Thailand	Ministry of Public Health 1997	Ministry of Public Health 1996	ADB Key Ind. 2001: Table 2	ADB Key Ind. 2001: Table 2	Population Census 2000: Key Ind.	Ministry of Public Health 1996	WHO HIV/AIDS Report 2001: Table 1
Viet Nam	Human Development Report 2001: Table 7	Human Development Report 2001: Table 2	Human Development Report 2001: Table 3	Human Development Report 2001: Table 3	Viet Nam Population Strategy: Table 1.1	Viet Nam Human Development Report 2001: Table 8	WHO HIV/AIDS Report 2001: Table 1

Appendix 2: Data Tables

Table 7: Education Indicators

	Primary Net Enrolment Ratio	Primary Enrolment Gender Gap	Primary Attainment Rate	Secondary Net Enrolment Ratio	Lower Secondary Attainment	Male Literacy Rate	Female Literacy Rate
	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Cambodia							
Whole Country							
Banteay Meanchey	72.0	4.9	16.2	15.5	6.4	79.4	55.6
Battambang	70.9	-1.4	19.4	16.5	7.9	82.1	60.7
Kampong Cham	69.3	1.4	15.4	13.4	6.0	76.1	53.7
Kampong Chhnang	68.6	8.0	15.2	9.5	5.4	76.5	53.7
Kampong Speu	60.7	3.6	18.0	10.6	7.6	79.2	51.6
Kampong Thom	66.6	2.1	12.9	11.4	5.6	71.3	51.3
Kampot	67.3	9.9	17.3	17.4	7.2	78.0	53.0
Kandal	71.7	-1.7	21.0	16.9	8.6	83.7	62.8
Koh Kong	53.6	6.3	18.7	8.0	7.7	75.4	48.7
Kratie	57.7	6.4	16.7	12.1	7.2	75.7	58.4
Mondul Kiri	29.4	19.9	10.0	7.1	6.0	52.4	24.0
Phnom Penh	83.1	0.6	25.7	42.5	16.5	92.3	78.6
Preah Vihear	57.7	6.4	9.1	12.1	3.9	67.9	45.2
Prey Veng	68.5	9.1	17.5	13.4	5.8	83.6	57.3
Pursat	54.6	9.6	16.7	10.3	8.0	82.5	59.5
Ratana Kiri	29.4	19.9	6.1	7.1	3.4	38.9	16.3
Siem Reap	58.3	7.8	10.3	7.9	4.0	63.9	43.1
Sihanouk Ville	67.3	9.9	21.9	17.4	10.1	82.8	58.2
Stung Treng	57.7	6.4	12.7	12.1	6.5	65.4	44.5
Svay Rieng	70.0	4.2	20.7	14.8	7.0	88.2	59.7
Takeo	70.0	-3.8	21.7	16.2	8.7	81.8	54.0
Otdar Meanchey	58.3	7.8	9.4	7.9	3.6	62.2	30.7
Krong Kep	67.3	9.9	16.2	17.4	5.4	74.0	47.8
Krong Pailin	70.9	-1.4	16.8	16.5	7.7	83.8	58.4
Lao PDR							
Whole Country							
Vientiane Municipality	99.8	0.3	53.9	66.1	29.7	96.0	84.0
Phongsaly	55.4	25.0	12.8	18.3	5.5	55.0	33.0
Luangnamtha	56.1	13.9	12.1	31.3	4.6	51.0	19.0
Oudomxay	51.9	28.3	11.6	18.5	3.9	78.0	36.0
Bokeo	72.8	12.5	14.1	32.6	4.3	70.0	33.0
Luangprabang	70.8	12.2	18.2	30.2	6.1	77.0	50.0
Huaphanh	65.5	20.8	19.6	25.7	4.8	72.0	38.0
Xayaboury	87.6	3.9	28.7	30.9	7.6	87.0	68.0
Xiengkhuang	81.3	11.0	25.6	43.6	8.8	83.0	58.0
Vientiane	97.1	1.8	36.9	50.7	14.8	89.0	69.0
Bolikhamxay	86.3	7.3	26.4	34.6	9.0	87.0	63.0
Khammuane	80.1	8.9	22.1	29.4	8.1	87.0	60.0
Savannakhet	69.4	10.5	24.0	27.5	9.6	81.0	50.0
Saravane	59.2	14.2	16.6	15.0	5.1	78.0	41.0
Sekong	44.5	9.2	10.9	11.8	5.2	72.0	37.0
Champasak	83.8	4.2	30.6	32.6	9.9	89.0	57.0
Attapeu	55.7	12.6	15.2	19.1	5.6	81.0	57.0
Xaysomboun SR	85.2	16.2	19.7	34.5	6.7	76.0	43.0
Thailand							
Whole Country		4.3		55.4			
Northeast Region			55.0		28.4		
North Region			47.3		29.3		
Kalasin	71-80					99.9	99.9
Khon Kaen	71-80					99.9	99.7
Chanthaburi	91-100					99.9	99.7
Chaiyaphum	81-90					99.6	99.0
Chiang Rai	91-100					98.9	98.5
Chiang Mai	91-100					96.7	96.3
Trad	91-100					99.9	99.8
Yasothon	62-70					99.9	99.7
Nakhon Nayok	81-90					99.9	99.9
Nakhon Phanom	62-70					99.8	99.8
Nakhon Ratchasima	62-70					100.0	99.9
Nan	81-90					98.4	97.7
Buriram	62-70					100.0	100.0

* Data for this indicator for Thailand are in ranges.

Appendix 2: Data Tables

Table 7: Education Indicators - continued

	Primary Net Enrolment Ratio	Primary Enrolment Gender Gap	Primary Attainment Rate	Secondary Net Enrolment Ratio	Lower Secondary Attainment	Male Literacy Rate	Female Literacy Rate
	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Prachinburi	71-80					99.8	99.6
Phitsanulok	71-80					100.0	99.9
Phetchabun	71-80					98.5	97.4
Maha Sarakham	62-70					99.9	99.7
Roi Et	71-80					99.9	99.9
Lampang	81-90					99.7	99.6
Loei	71-80					99.5	99.4
Si Saket	71-80					100.0	100.0
Sakon Nakhon	62-70					99.9	99.8
Surin	62-70					99.7	99.6
Nong Khai	62-70					99.7	99.6
Udon Thani	71-80					99.9	99.8
Uttaradit	71-80					99.5	99.3
Ubon Ratchathani	71-80					100.0	100.0
Phayao	71-80					99.3	98.8
Mukdahan	71-80					99.5	99.5
Sa Kaeo	91-100					100.0	100.0
Nong Bua Lamphu	62-70					100.0	99.9
Amnat Charoen	71-80					100.0	100.0
Viet Nam							
Whole Country			65.0		39.7		
Mekong Delta							
Central Highlands							
Lai Chau	55.0	19.8		21.9		66.2	40.7
Son La	70.8	11.8		28.6		81.7	56.8
Nghe An	91.4	0.8		63.2		96.1	90.0
Ha Tinh	91.2	0.1		64.4		97.5	92.0
Quang Binh	88.6	0.0		58.2		95.7	88.6
Quang Tri	87.1	1.6		64.7		93.3	81.2
Thua Thien Hue						92.6	79.8
Quang Nam	91.0	0.5		65.8		95.2	86.5
Khanh Hoa	87.8	0.3		53.2		94.7	88.6
Kon Tum	77.5	0.9		37.3		83.7	67.5
Gia Lai	74.3	1.9		38.8		80.8	64.3
Dak Lak	84.7	0.2		47.3		91.1	83.0
Lam Dong	88.1	0.5		51.3		93.6	86.1
Binh Phuoc	83.2	0.6		41.8		91.0	83.1
Long An	89.0	0.1		45.6		94.8	88.3
Dong Thap	83.1	0.6		34.4		89.2	82.5
An Giang	79.3	0.2		31.6		88.1	81.5
Tien Giang	90.3	0.0		46.6		94.1	87.6
Vinh Long	89.8	0.0		51.6		93.5	87.8
Ben Tre	88.5	-0.4		44.7		93.6	87.3
Kien Giang	80.9	0.4		32.1		90.8	84.8
Can Tho	84.3	-0.2		37.5		92.0	86.7
Tra Vinh	83.4	0.8		39.2		87.9	77.9
Soc Trang	81.6	0.3		32.3		89.1	81.9
Bac Lieu	81.0	0.7		32.7		91.0	86.6
Ca Mau	81.6	1.0		31.9		94.2	91.0
Sources							
Cambodia	Health Survey 2000: Table 2.6	Health Survey 2000: Table 2.6	Population Census 1998: PopMap	Health Survey 2000: Table 2.6	Population Census 1998: PopMap	Population Census 1998: PopMap	Population Census 1998: PopMap
Lao PDR	Ministry of Education 1997-98	Ministry of Education 1997-98	Population Census 1995: Table 4.5	Human Development Report 2001	Population Census 1995: Table 4.5	Exp. & Cons. Survey 1997- 98: Table 20	Exp. & Cons. Survey 1997- 98: Table 20
Thailand	UNICEF 2001	UNESCO 2002	Labour Survey 2002: Table 3	UNESCO 2002	Labour Survey 2002: Table 3	National Ed. Committee 1995	National Ed. Committee 1995
Viet Nam	Population Census 1999: Table 4.10x	Population Census 1999: Table 4.10x	Living Standards Survey 1997-8: Table 2.52	Population Census 1999: Table 4.10x	Living Standards Survey 1997-8: Table 2.52	Population Census 1999: Table 4.1	Population Census 1999: Table 4.1

This Appendix lists the sources used for creating the maps in this Atlas. Sources are listed by the short names used in the dataset tables in Appendix 2 and in the tables accompanying each map. Full bibliographic references are also given. Sources used specifically for particular countries are listed by country name, with international data sources listed below.

Cambodia

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