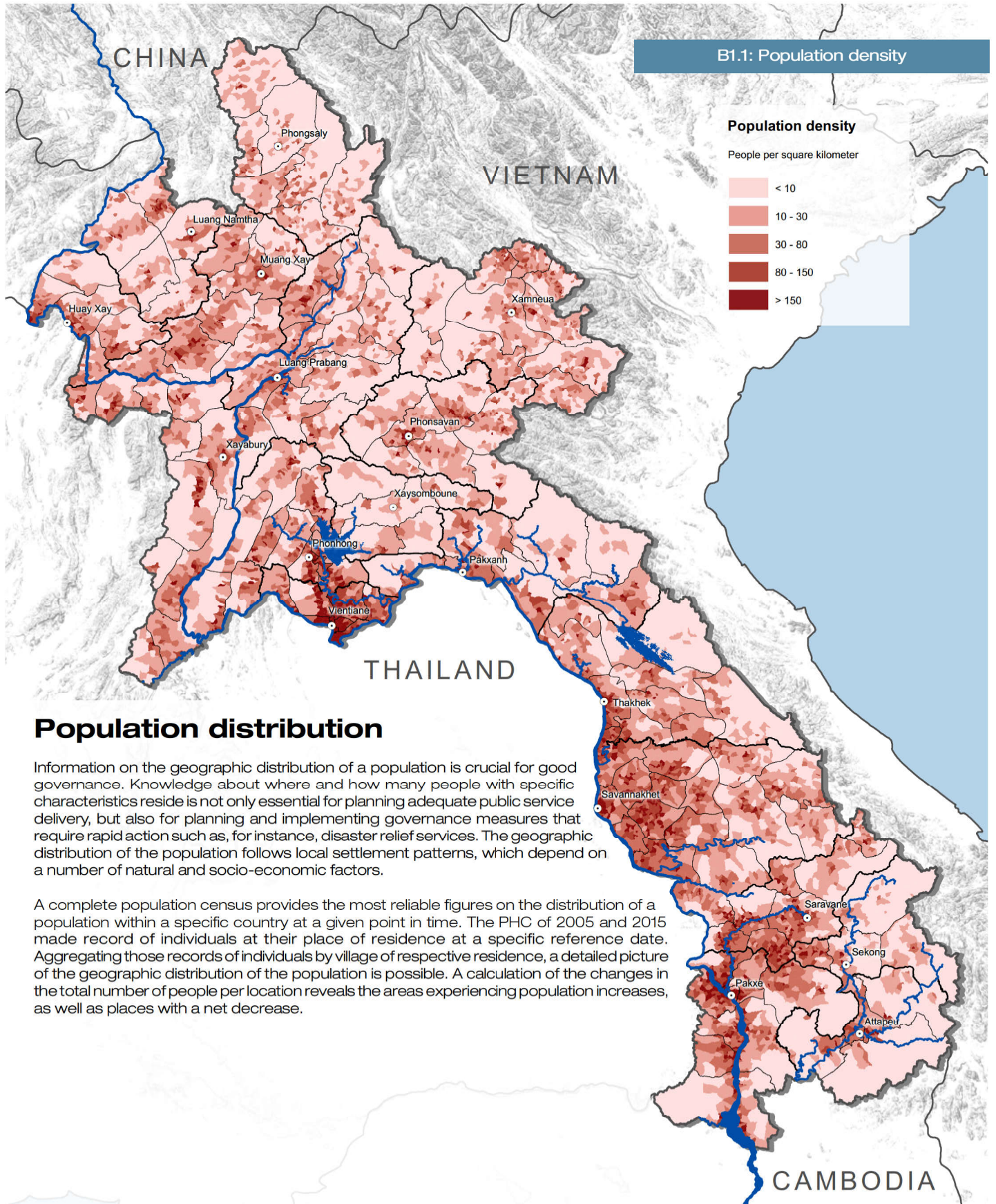




# DEMOGRAPHY





### Population distribution

Information on the geographic distribution of a population is crucial for good governance. Knowledge about where and how many people with specific characteristics reside is not only essential for planning adequate public service delivery, but also for planning and implementing governance measures that require rapid action such as, for instance, disaster relief services. The geographic distribution of the population follows local settlement patterns, which depend on a number of natural and socio-economic factors.

A complete population census provides the most reliable figures on the distribution of a population within a specific country at a given point in time. The PHC of 2005 and 2015 made record of individuals at their place of residence at a specific reference date. Aggregating those records of individuals by village of respective residence, a detailed picture of the geographic distribution of the population is possible. A calculation of the changes in the total number of people per location reveals the areas experiencing population increases, as well as places with a net decrease.



## Spatial patterns in 2015

The population of 6.492 million people living in the Lao PDR in 2015 is distributed rather unevenly across the country's territory of nearly 236.800 km<sup>2</sup>. Topography plays a significant role in determining population distribution and density: the majority of the country's land is mountainous terrain with a low population density, whereas the country's fertile flat plains support a greater density of people. The country's main lowland areas are located primarily along the Mekong River and its tributaries where Vientiane Capital City and other main provincial capitals are located. As illustrated in Map B1.1, the population is concentrated primarily in and around the country's main urban areas of Vientiane, Pakxe, and Savannakhet, followed by the rural lowland areas of Vientiane Capital City, Savannakhet Province, and Champasak Province. About one quarter of the Lao population lived in towns throughout the country and in Vientiane Capital City in 2015. The urban areas in the Lao PDR are relatively small compared to those in neighbouring countries. Vientiane Capital City, with a population of over half a million inhabitants, is by far the largest urban area in the country, followed by Savannakhet, Pakxe, and Luang Prabang towns, all with populations between 50,000 and 100,000. More than half of all provincial capitals have fewer than 20 thousand inhabitants, whereas district capitals are typically home to fewer than 5,000 people.

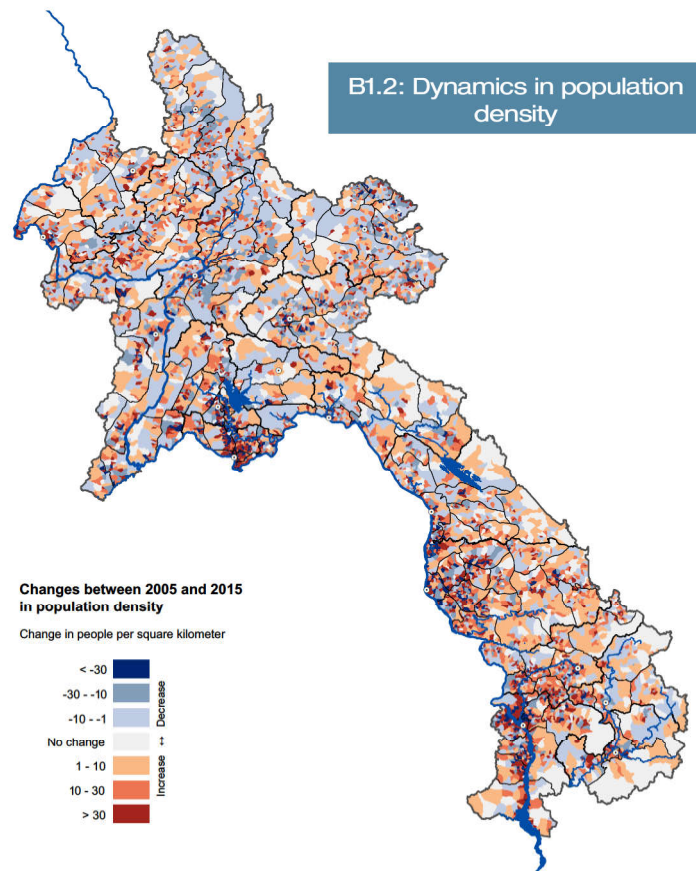
These main urban areas and the relatively densely populated rural areas of Savannakhet Province, Champasak Province, and Vientiane Capital City contrast sharply with the sparsely populated mountainous areas of the north and of the eastern parts of southern Lao PDR, both of which have a low population density, interspersed with somewhat higher population densities only in the valleys along the main transit routes (compare Map A1.2).

The ratio of men to women (the sex ratio) in the Lao PDR was 101 in 2015, implying just marginally more men than women. There are a number of areas in the country with more women than men (ratios below 100, shown in brown on Map B1.3), including parts of Luang Namtha and Bokeo Provinces, as well as Savannakhet Province. The age structure of the population, as well as patterns of migration, strongly influence the sex ratio of any given location (compare Maps B1.3, as well as C1.1 and C1.3), where younger populations tend to have a higher sex ratio than older populations, or where gender specific labour migration influences the gender balance for in- and out-migration areas.

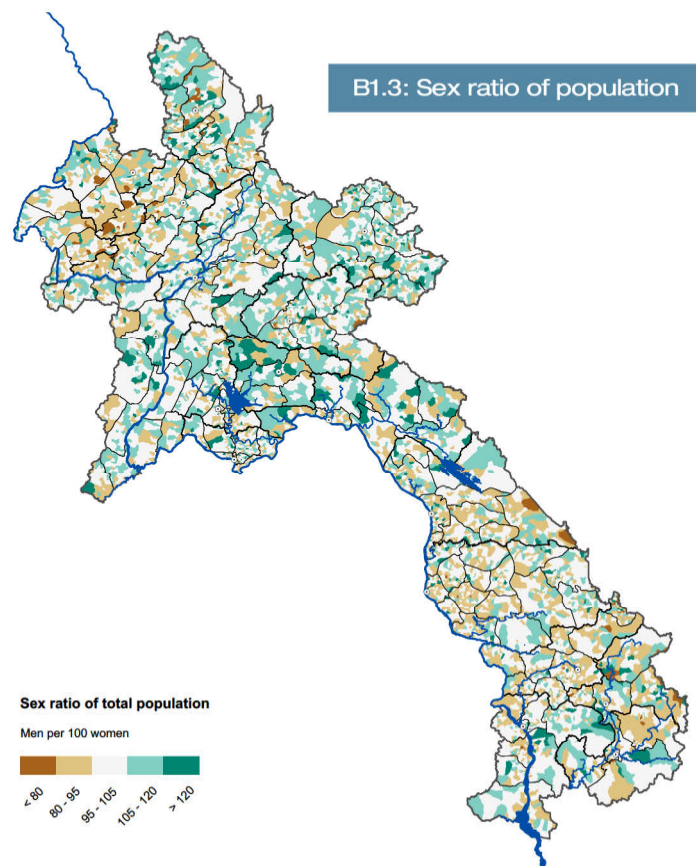
## Dynamics between 2005 and 2015

Overall, the country's population has grown at a rate of 1.45% per year between 2005 and 2015, down from an average of over 2% in the previous decade. Significant population increases have occurred primarily in and around the country's main urban areas, namely in Vientiane Capital City, followed by the areas around the province capitals of Champasak and Savannakhet. Overall, the southern region has experienced greater population growth than the northern region, reflecting the general population density and distribution. Decreases in population are most evident in the more remote areas of the north (compare Maps A2.1 and A2.2).

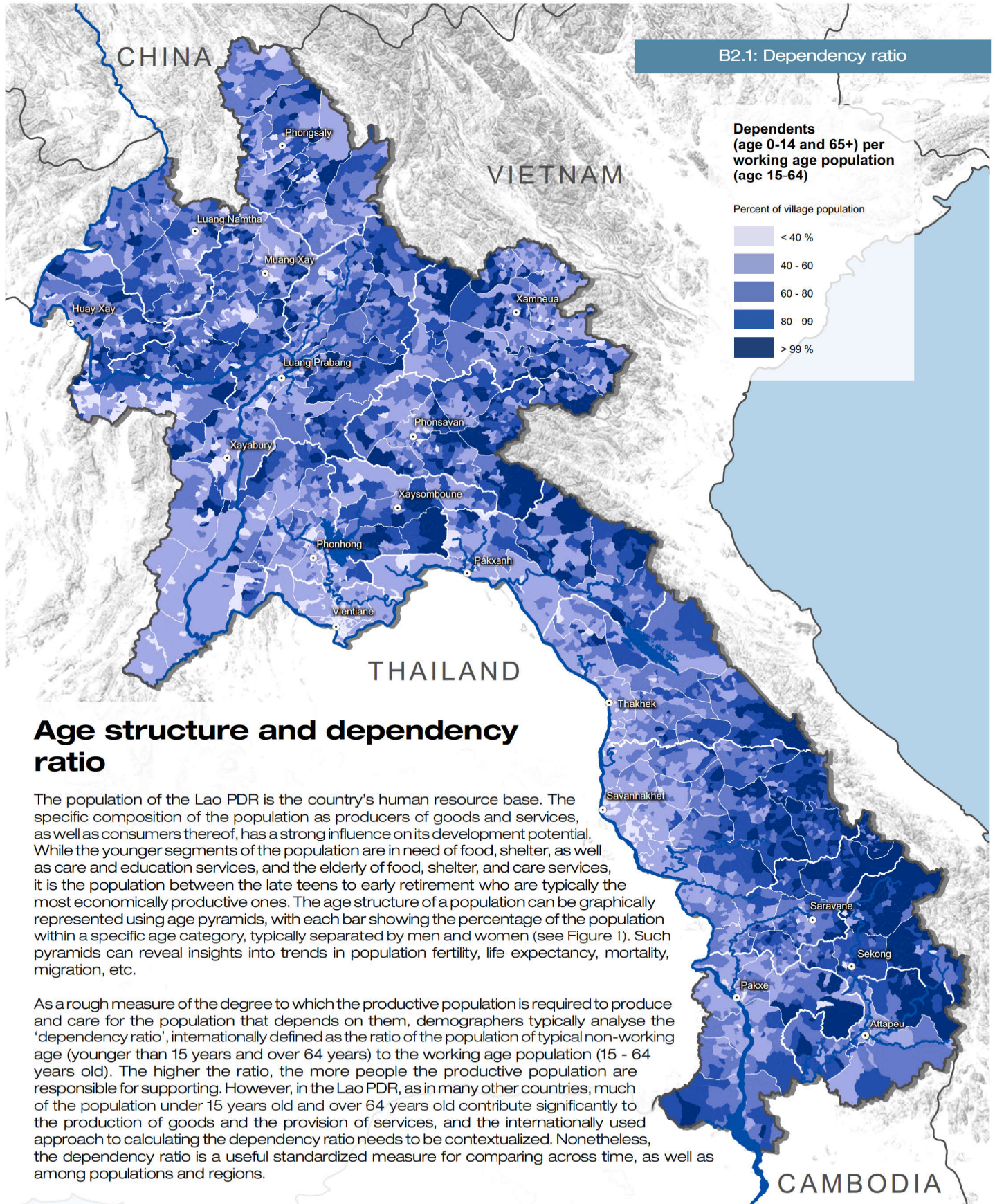
B1.2: Dynamics in population density



B1.3: Sex ratio of population







## Age structure and dependency ratio

The population of the Lao PDR is the country's human resource base. The specific composition of the population as producers of goods and services, as well as consumers thereof, has a strong influence on its development potential. While the younger segments of the population are in need of food, shelter, as well as care and education services, and the elderly of food, shelter, and care services, it is the population between the late teens to early retirement who are typically the most economically productive ones. The age structure of a population can be graphically represented using age pyramids, with each bar showing the percentage of the population within a specific age category, typically separated by men and women (see Figure 1). Such pyramids can reveal insights into trends in population fertility, life expectancy, mortality, migration, etc.

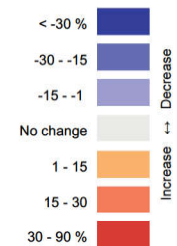
As a rough measure of the degree to which the productive population is required to produce and care for the population that depends on them, demographers typically analyse the 'dependency ratio', internationally defined as the ratio of the population of typical non-working age (younger than 15 years and over 64 years old) to the working age population (15 - 64 years old). The higher the ratio, the more people the productive population are responsible for supporting. However, in the Lao PDR, as in many other countries, much of the population under 15 years old and over 64 years old contribute significantly to the production of goods and the provision of services, and the internationally used approach to calculating the dependency ratio needs to be contextualized. Nonetheless, the dependency ratio is a useful standardized measure for comparing across time, as well as among populations and regions.



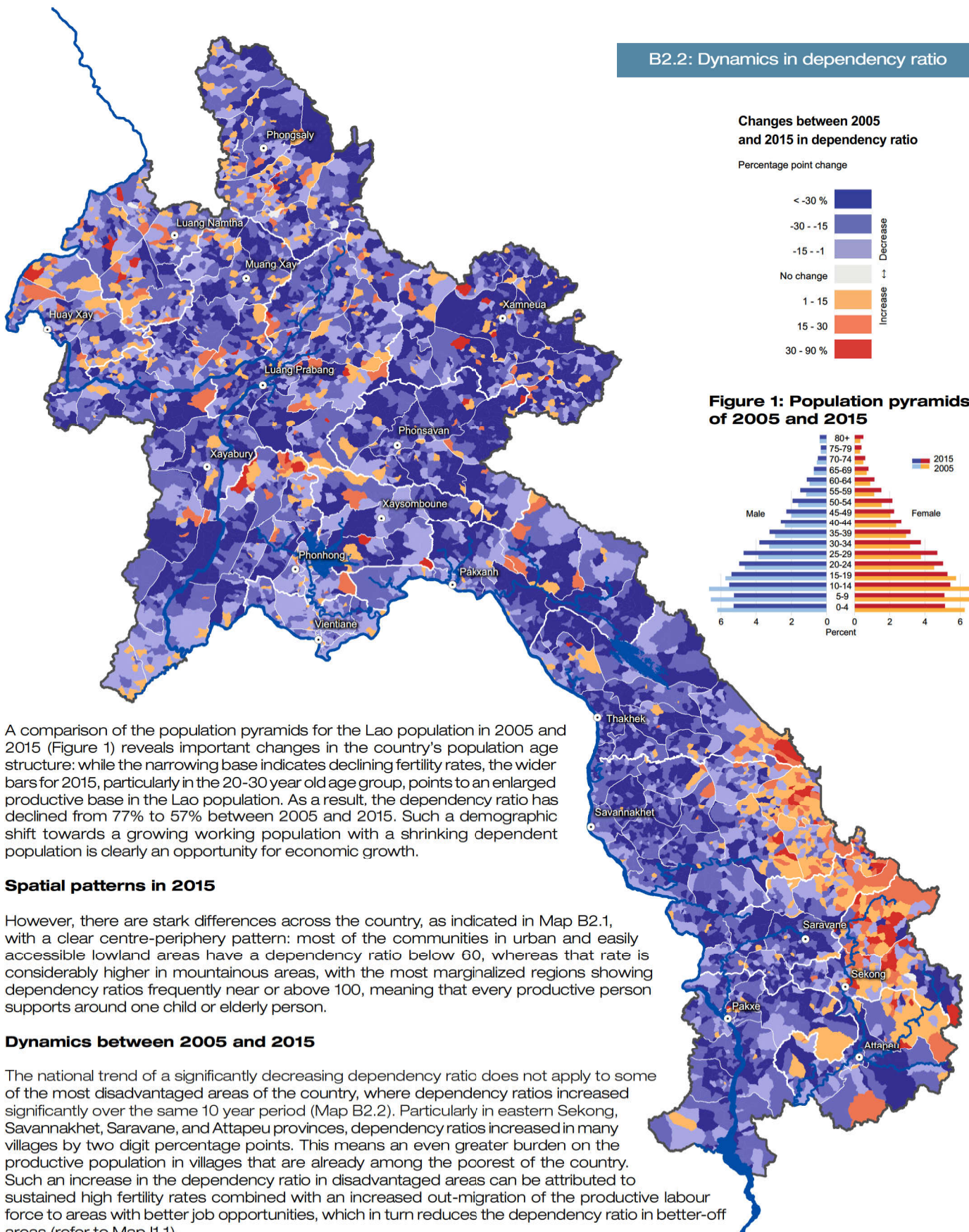
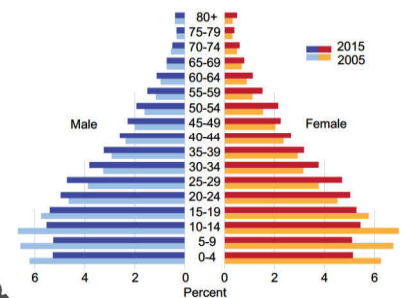
## B2.2: Dynamics in dependency ratio

### Changes between 2005 and 2015 in dependency ratio

Percentage point change



**Figure 1: Population pyramids of 2005 and 2015**



A comparison of the population pyramids for the Lao population in 2005 and 2015 (Figure 1) reveals important changes in the country's population age structure: while the narrowing base indicates declining fertility rates, the wider bars for 2015, particularly in the 20-30 year old age group, points to an enlarged productive base in the Lao population. As a result, the dependency ratio has declined from 77% to 57% between 2005 and 2015. Such a demographic shift towards a growing working population with a shrinking dependent population is clearly an opportunity for economic growth.

### Spatial patterns in 2015

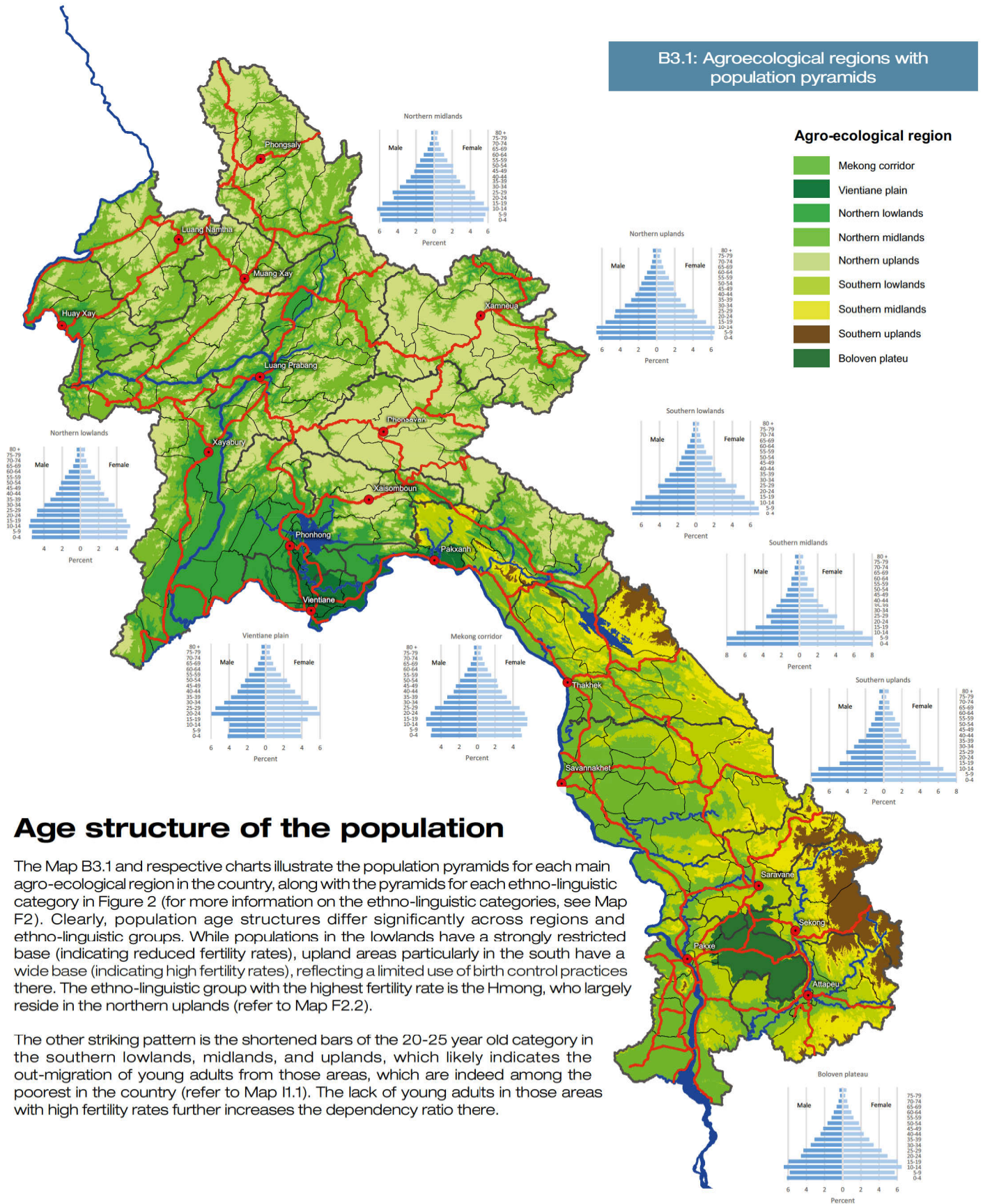
However, there are stark differences across the country, as indicated in Map B2.1, with a clear centre-periphery pattern: most of the communities in urban and easily accessible lowland areas have a dependency ratio below 60, whereas that rate is considerably higher in mountainous areas, with the most marginalized regions showing dependency ratios frequently near or above 100, meaning that every productive person supports around one child or elderly person.

### Dynamics between 2005 and 2015

The national trend of a significantly decreasing dependency ratio does not apply to some of the most disadvantaged areas of the country, where dependency ratios increased significantly over the same 10 year period (Map B2.2). Particularly in eastern Sekong, Savannakhet, Saravane, and Attapeu provinces, dependency ratios increased in many villages by two digit percentage points. This means an even greater burden on the productive population in villages that are already among the poorest of the country. Such an increase in the dependency ratio in disadvantaged areas can be attributed to sustained high fertility rates combined with an increased out-migration of the productive labour force to areas with better job opportunities, which in turn reduces the dependency ratio in better-off areas (refer to Map I1.1).



B3.1: Agroecological regions with population pyramids



### Age structure of the population

The Map B3.1 and respective charts illustrate the population pyramids for each main agro-ecological region in the country, along with the pyramids for each ethno-linguistic category in Figure 2 (for more information on the ethno-linguistic categories, see Map F2). Clearly, population age structures differ significantly across regions and ethno-linguistic groups. While populations in the lowlands have a strongly restricted base (indicating reduced fertility rates), upland areas particularly in the south have a wide base (indicating high fertility rates), reflecting a limited use of birth control practices there. The ethno-linguistic group with the highest fertility rate is the Hmong, who largely reside in the northern uplands (refer to Map F2.2).

The other striking pattern is the shortened bars of the 20-25 year old category in the southern lowlands, midlands, and uplands, which likely indicates the out-migration of young adults from those areas, which are indeed among the poorest in the country (refer to Map I1.1). The lack of young adults in those areas with high fertility rates further increases the dependency ratio there.



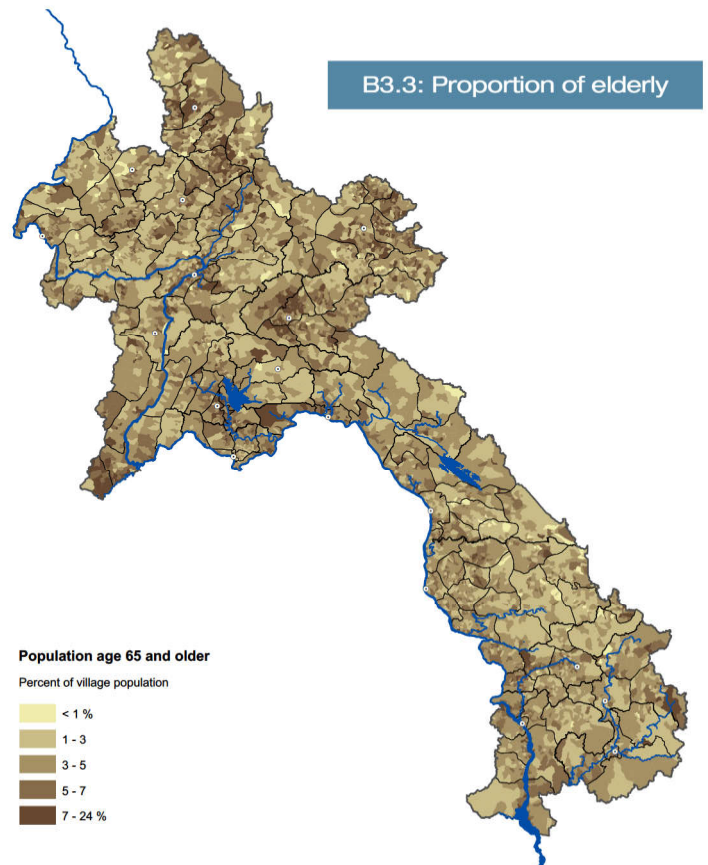
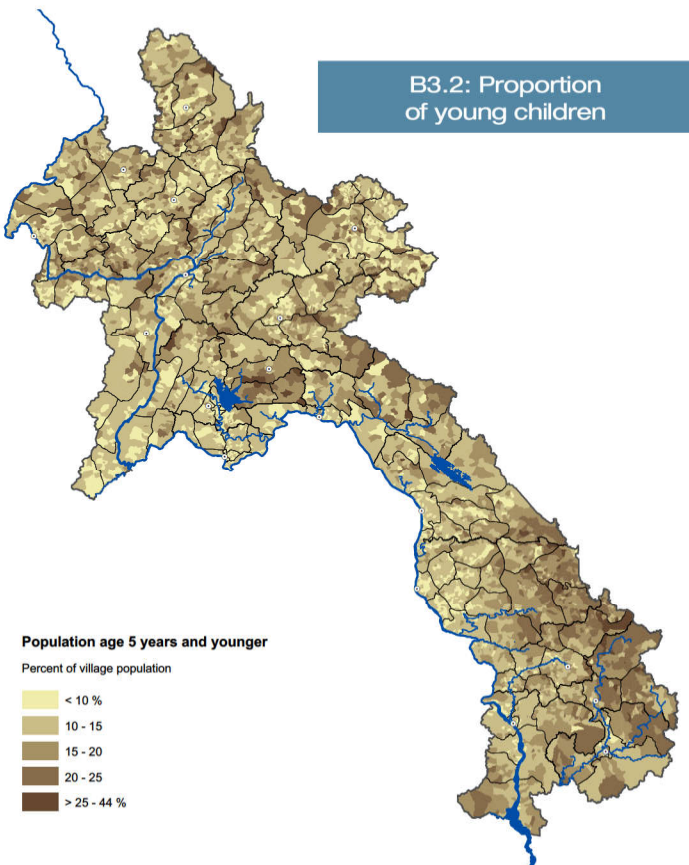
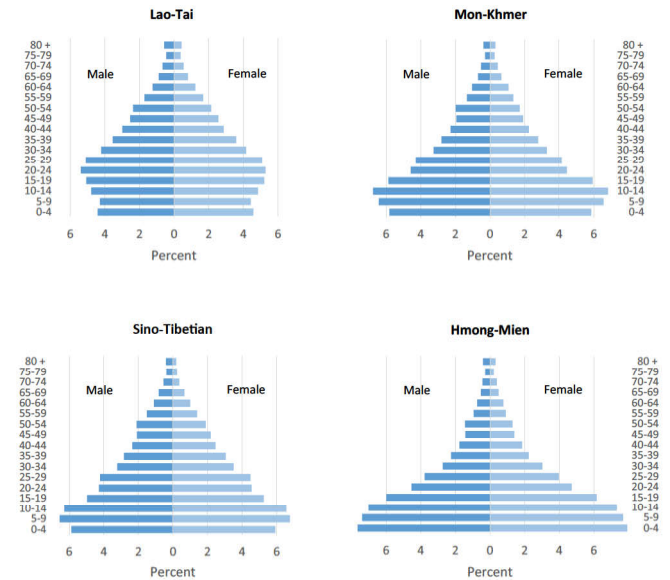
The dependency ratio presented on the previous page is a useful measure for gauging the overall productive potential of a population at a given point in time, and to compare this over time and space. A further disaggregation of the dependency pattern between the young and the elderly across space can be used to gain additional understanding of the needs and economic potential of populations in different areas.

The demographic change among the youngest age groups is a key indicator of the fertility of a population. Decreases in fertility rates point to improvements in access to health services, and can indicate what the future age structure of the population will look like. On the other hand, the relative size of the elderly population is an indicator of life expectancy, which can also be linked to health care and living standards.

At a national level, the youth dependency ratio (i.e. the ratio of those under 15 years old to the 15-64 year olds) dropped from 70 to 50, while the old-age dependency ratio remains unchanged at 7%. At the same time, the fertility rate has declined from 4.5% in 2005 to 3.2% in 2015, which can be attributed to improvements in reproductive health and to the more widespread use of contraceptives. The elderly population, on the other hand, remained largely unchanged even though the life expectancy at birth has increased from 63 to 65 for women, and from 59 to 62 for men between the two censuses.

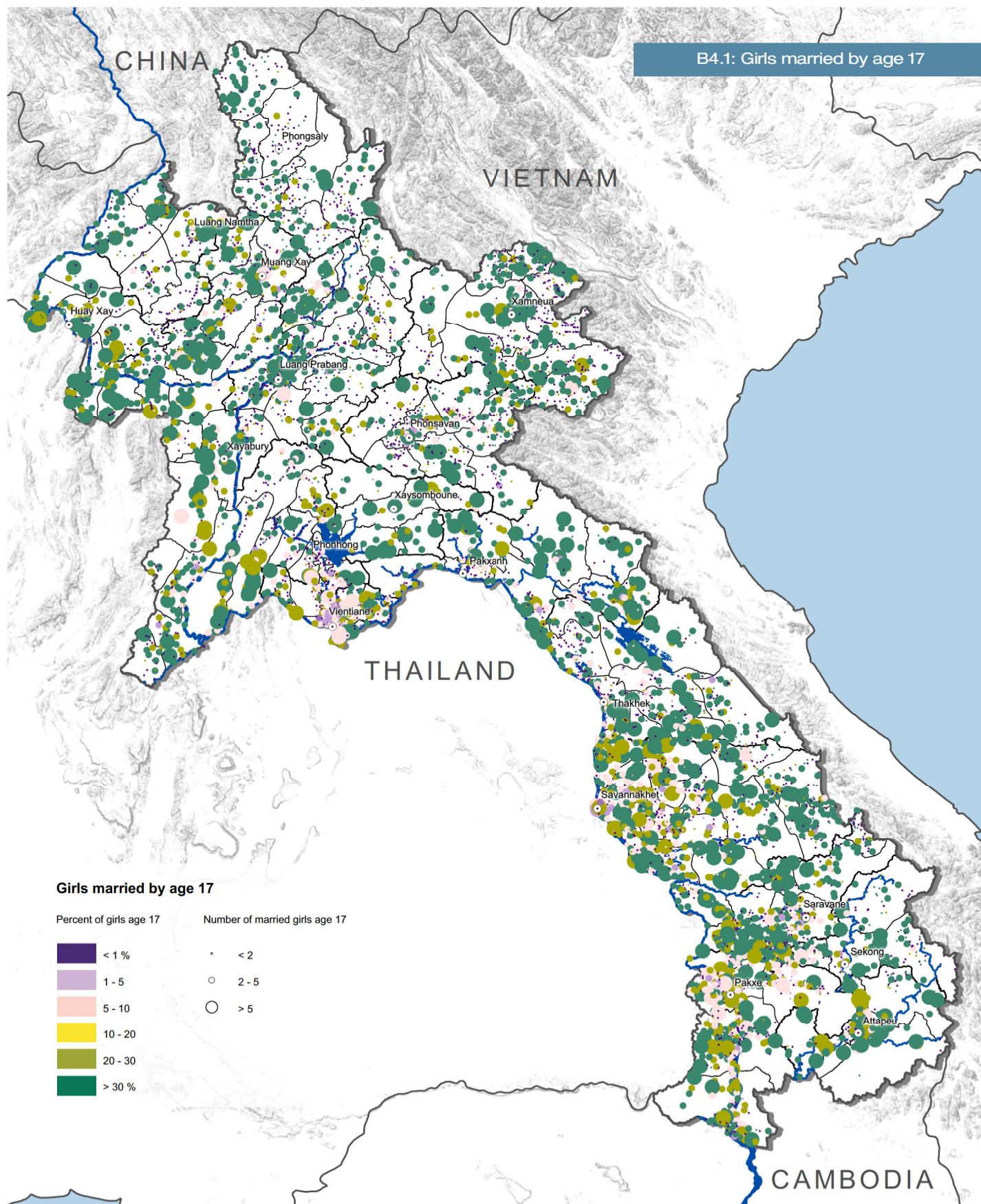
The patterns of the regionally disaggregated population pyramids (Map B3.1) are reflected in the geographic distribution of the share of young and elderly populations, shown in Maps B3.2 and B3.3. In the more marginal areas, dependents are predominantly children, pointing to the high fertility rates there, whereas a comparatively higher share of elderly people tends to occur in more developed lowland areas with better services and infrastructure.

**Figure 2: Population pyramids by ethno-linguistic categories**





B4.1: Girls married by age 17





## Early marriage

Early marriage or child marriage is defined internationally as marriage before age 18. Although early marriage is internationally considered a violation of human rights (IPU & WHO, 2016), it is particularly common in less developed countries. Early marriage applies to both boys and girls who enter into marriage before 18, but this is far more common among girls.

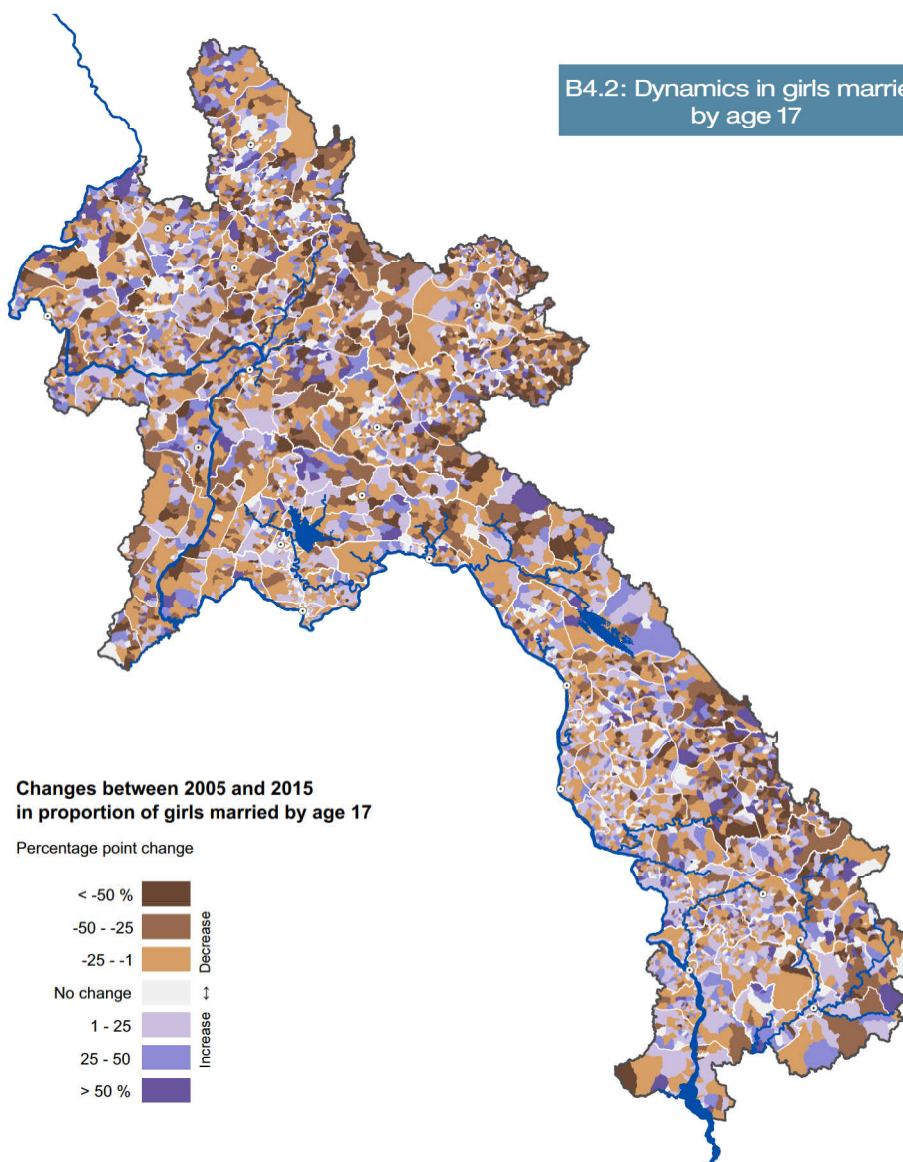
The social and personal costs of early marriage are considerable. People who marry early are more likely to drop out of school and are often less socially engaged than their unmarried peers, which impacts not only their physical and mental wellbeing but also their employment prospects and thus their future prosperity and contributions to society on the whole. Other potential consequences include health issues, as young married girls and women tend to get pregnant early. According to the World Health Organization (WHO) (2016), pregnancy and childbirth related death particularly affects girls between 15 and 19 years old in less developed countries.

### Spatial patterns in 2015

Early marriage is still common in the Lao PDR, and relates to the high adolescent birth rates observed (see Map E4.1). Nationwide, over 16% of all 17 year old girls and over 5% of 17 year old boys were married in 2015. Although the legal age for marriage is 18, individuals marry at age 15 or even younger in some ethnic groups (IPU & WHO, 2016). Those who marry early tend to have low levels of education and come from poor households. Early marriage is more common in rural regions than in urban settings, and is more common among certain ethnic groups.

Map B4.1 illustrates the spatial distribution of people already married by age 17 across the country, with the number per village represented by circle size, and the share of all 17 year olds depicted with different colours. In many parts of the country, over 30% of girls are married before age 18. This appears particularly common in much of the south, as well as in many villages in Huaphanh, Xayabury, Oudomxai, and eastern Luang Prabang Provinces in the north, and also in Borikhamxay in central Lao PDR. Rates of the population who are married by age 17 are clearly much lower in and around Vientiane Capital City and Pakxe town, as well as in much of Phongsaly and western Luang Prabang provinces.

B4.2: Dynamics in girls married by age 17



### Dynamics between 2005 and 2015

Map B4.2 shows few distinctive spatial patterns in the changes of early marriage rates between the 2005 and 2015 censuses. While there is an overall decrease in early marriages across the country, there are smaller areas with increases in early marriages, for instance in much of Luang Namtha province. Decreases appear particularly significant in many of the poor villages in eastern Savannakhet and Houaphan Provinces.

The overall positive trend of a decline in early marriage rates is likely related to improved access to education and improvements in living standards, although the strongest decreases in early marriage rates were observed in areas with persistently high poverty rates and thus few such improvements (compare Map I1.1). Despite these positive trends, there are still many areas with high rates of early marriage, especially in more remote rural areas.



## Marital status

Marital status is a key indicator of future population development. Demographic factors such as sex and age composition and life expectancy, socioeconomic factors such as income, education, and migration, as well as cultural and social norms and practices, all play an important role in determining a person's marital status. Since these factors differ across the country, variations in the marital status within the local populations can be expected.

According to the PHC 2015, almost two thirds of the population 15 years of age and older is married, and less than one third remain single. Divorced or separated and widowed people constitute 2.5% and 4.1% of that age group respectively.

The various maps on this double page show the share of village populations above 14 years of age according to their marital status – married, unmarried, divorced, or separated – along with the changes that occurred between the 2005 and 2015 censuses.

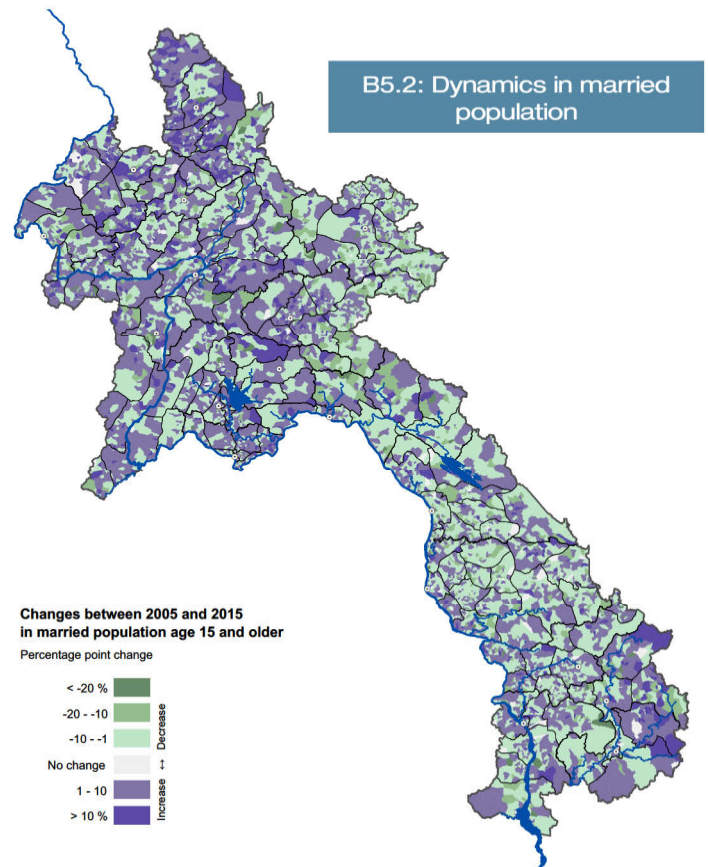
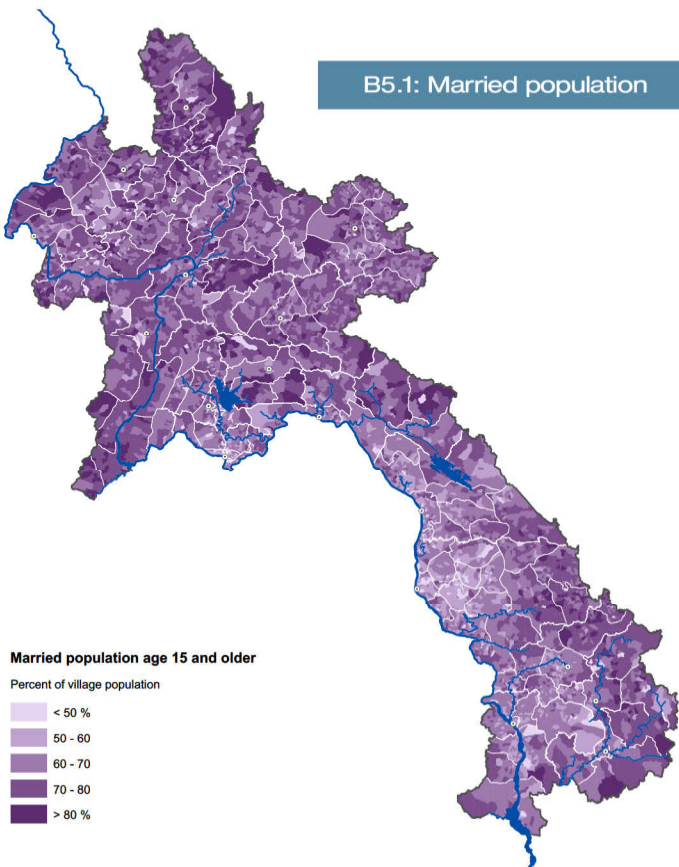
### Spatial patterns in 2015

The maps illustrate that in urban, peri-urban, and more developed lowland areas, a greater share of the population is unmarried compared to in more traditional, remote, mountainous areas. People tend to get married later if they pursue higher education or other professional careers, which is more often the case in better developed areas (see Map D4.5). Smaller relative married populations are also evident in areas where there is a stronger imbalance in the local sex ratio in favour of women (compare Map B1.3), where the majority of the unmarried people are female.

Although divorce is traditionally not common in the Lao PDR, there are significant differences in the divorce rates across the country. Generally, there are higher rates of divorce in the southern part of the country compared to the north, and divorce is clearly more common in more developed, densely populated lowland areas. Indeed, high divorce rates largely correspond with areas of high population density (compare Map B1.1), but interestingly also with a larger average living space per person and household (see Map H1.1). Divorce is certainly more common in less socially conservative settings, which is the case in more densely populated areas, where social networks and societal controls tend to be less strong than in remote areas where traditional family values may dominate.

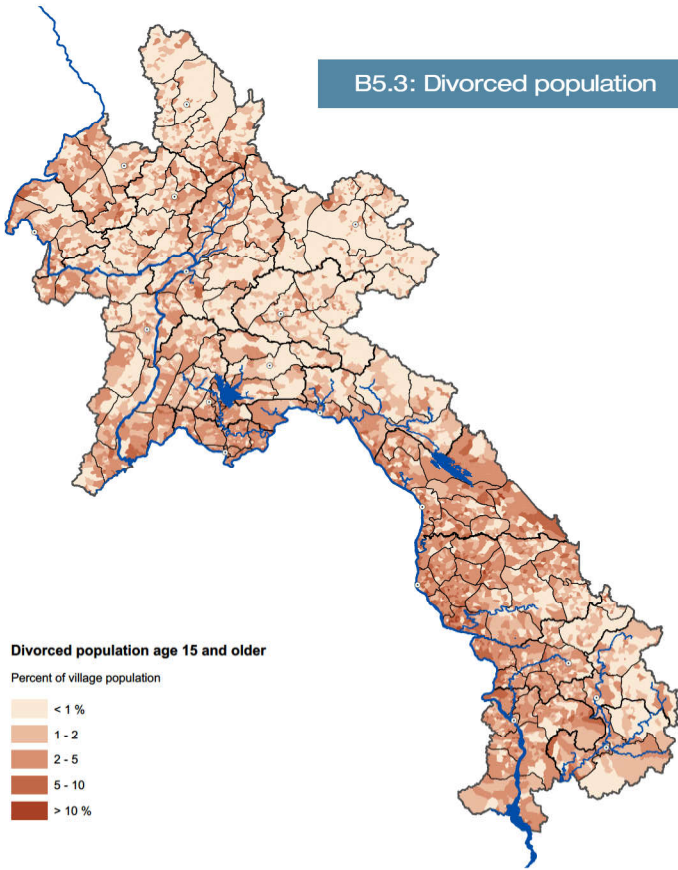
### Dynamics between 2005 and 2015

The share of the population which is married increased in the north, while the inverse is true in the south. Divorce rates have increased between 2005 and 2015, particularly in the densely populated areas along the Mekong River from Xayabury southwards, and in most of the poorer areas of Savannakhet Province. In contrast, divorce rates have markedly decreased in neighbouring and more impoverished Saravane Province.

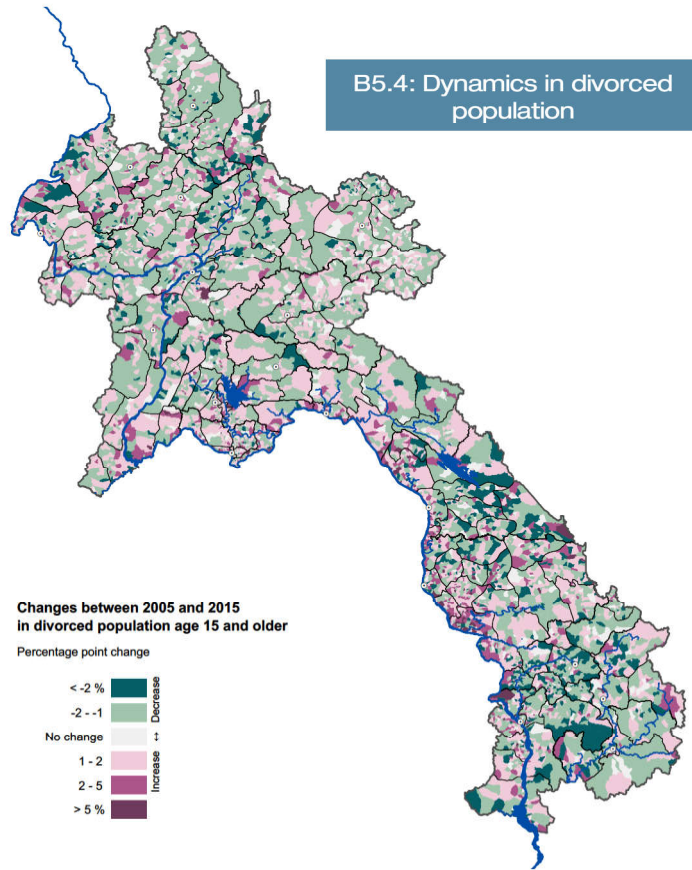




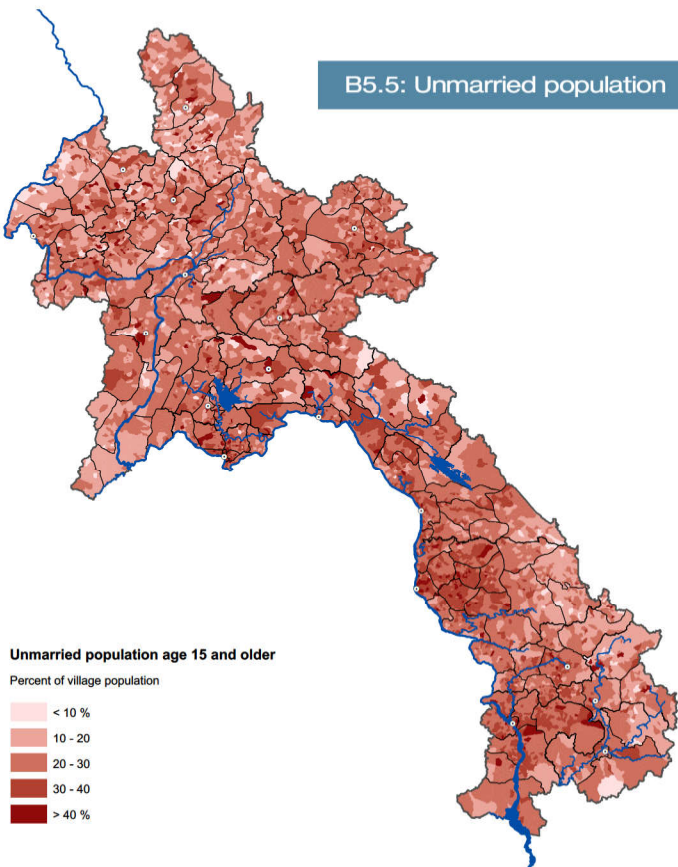
B5.3: Divorced population



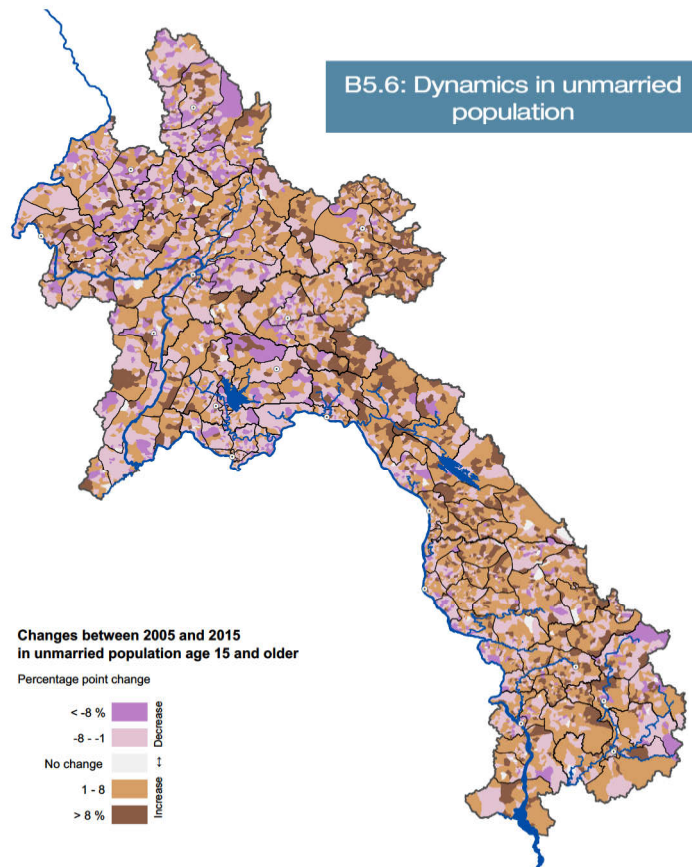
B5.4: Dynamics in divorced population



B5.5: Unmarried population

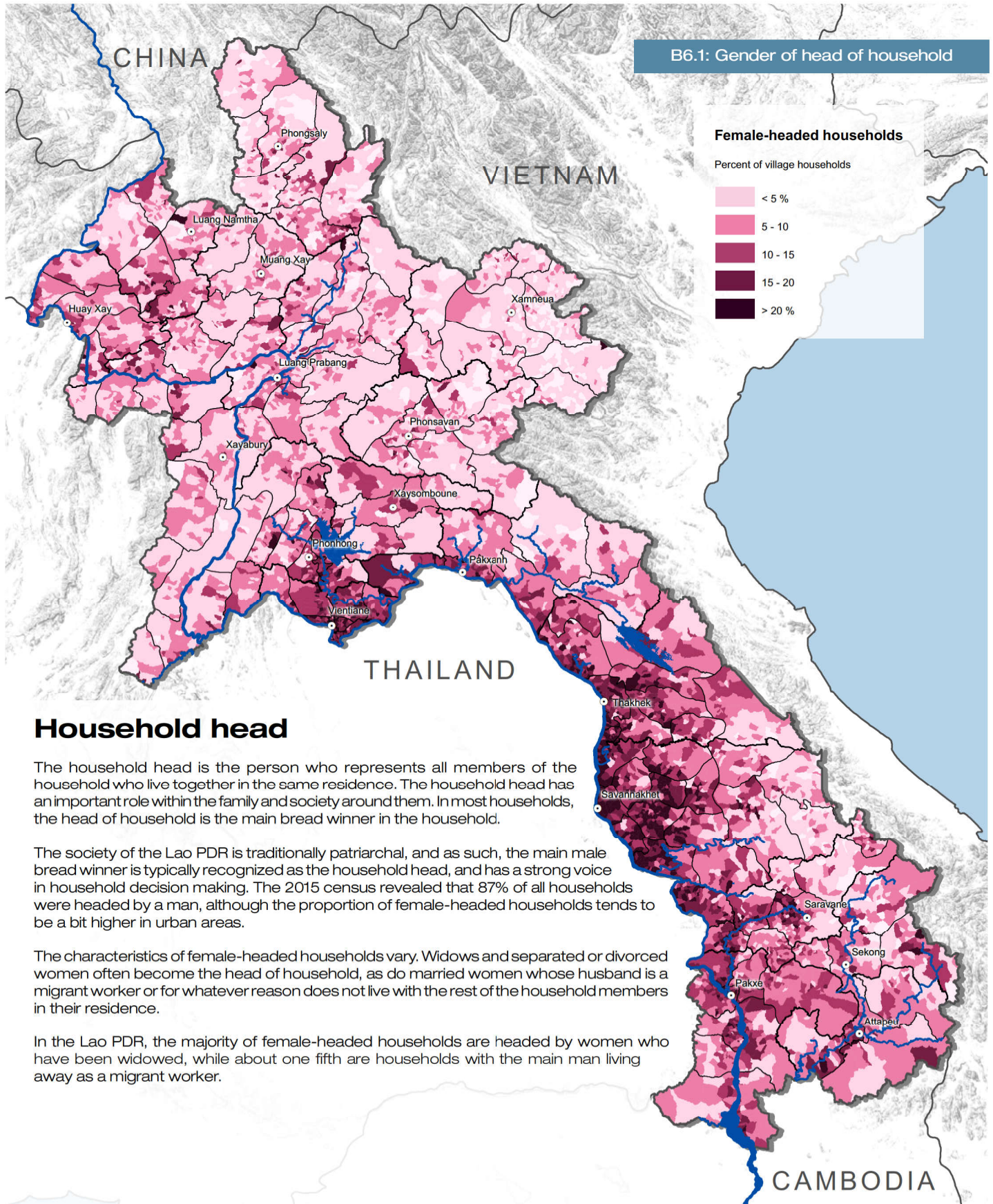


B5.6: Dynamics in unmarried population





B6.1: Gender of head of household



## Household head

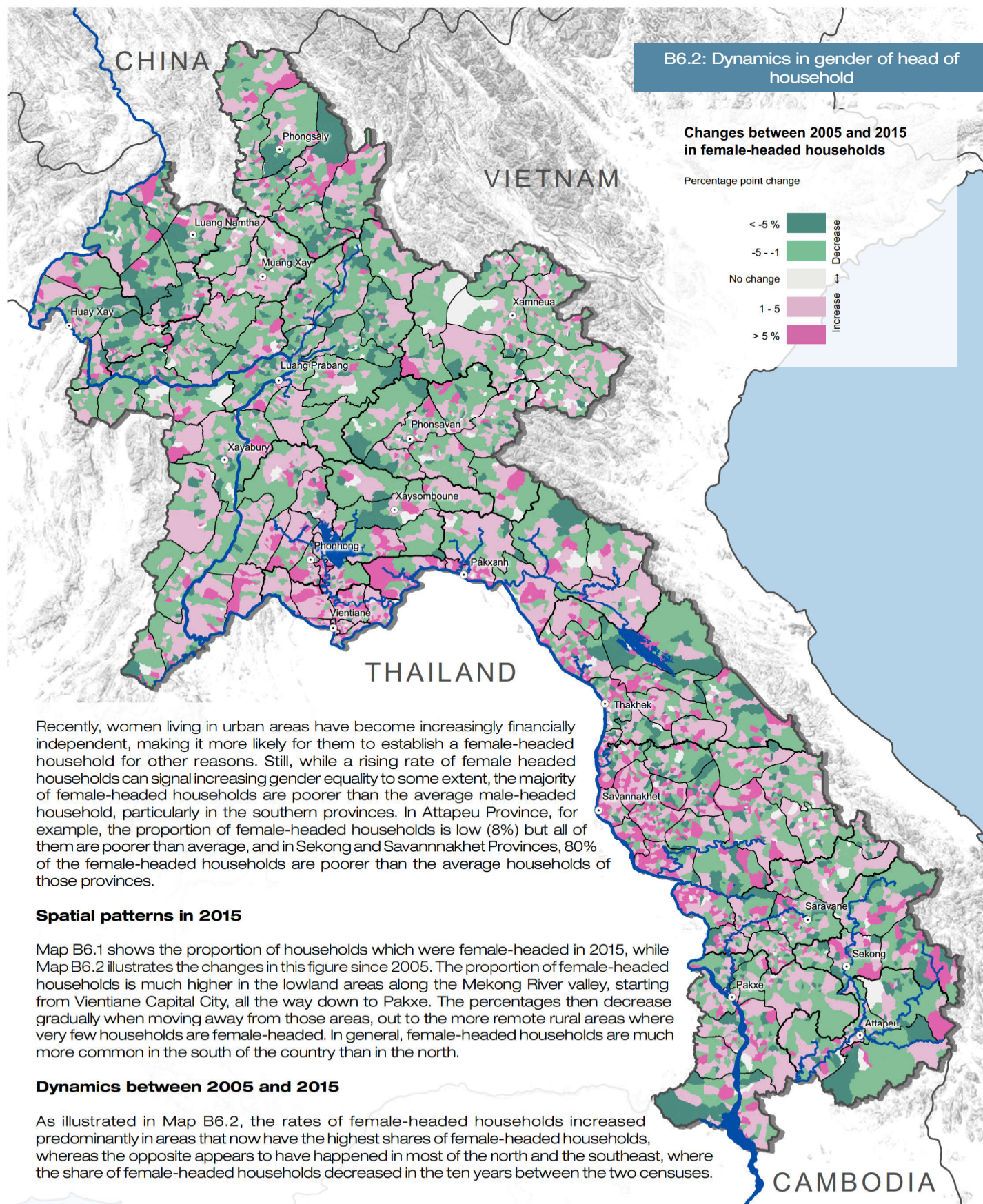
The household head is the person who represents all members of the household who live together in the same residence. The household head has an important role within the family and society around them. In most households, the head of household is the main bread winner in the household.

The society of the Lao PDR is traditionally patriarchal, and as such, the main male bread winner is typically recognized as the household head, and has a strong voice in household decision making. The 2015 census revealed that 87% of all households were headed by a man, although the proportion of female-headed households tends to be a bit higher in urban areas.

The characteristics of female-headed households vary. Widows and separated or divorced women often become the head of household, as do married women whose husband is a migrant worker or for whatever reason does not live with the rest of the household members in their residence.

In the Lao PDR, the majority of female-headed households are headed by women who have been widowed, while about one fifth are households with the main man living away as a migrant worker.





Recently, women living in urban areas have become increasingly financially independent, making it more likely for them to establish a female-headed household for other reasons. Still, while a rising rate of female headed households can signal increasing gender equality to some extent, the majority of female-headed households are poorer than the average male-headed household, particularly in the southern provinces. In Attapeu Province, for example, the proportion of female-headed households is low (8%) but all of them are poorer than average, and in Sekong and Savannakhet Provinces, 80% of the female-headed households are poorer than the average households of those provinces.

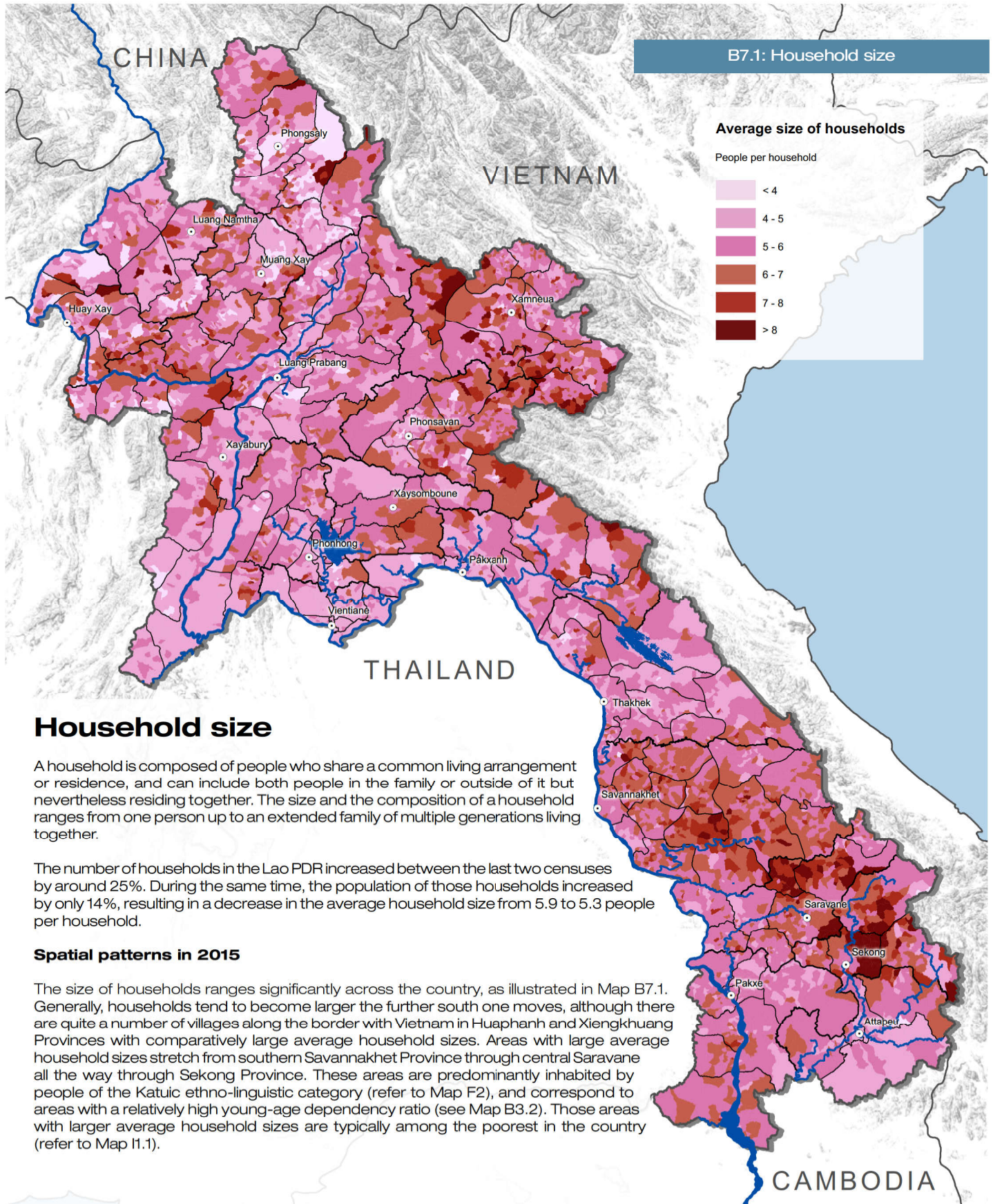
**Spatial patterns in 2015**

Map B6.1 shows the proportion of households which were female-headed in 2015, while Map B6.2 illustrates the changes in this figure since 2005. The proportion of female-headed households is much higher in the lowland areas along the Mekong River valley, starting from Vientiane Capital City, all the way down to Pakxe. The percentages then decrease gradually when moving away from those areas, out to the more remote rural areas where very few households are female-headed. In general, female-headed households are much more common in the south of the country than in the north.

**Dynamics between 2005 and 2015**

As illustrated in Map B6.2, the rates of female-headed households increased predominantly in areas that now have the highest shares of female-headed households, whereas the opposite appears to have happened in most of the north and the southeast, where the share of female-headed households decreased in the ten years between the two censuses.





## Household size

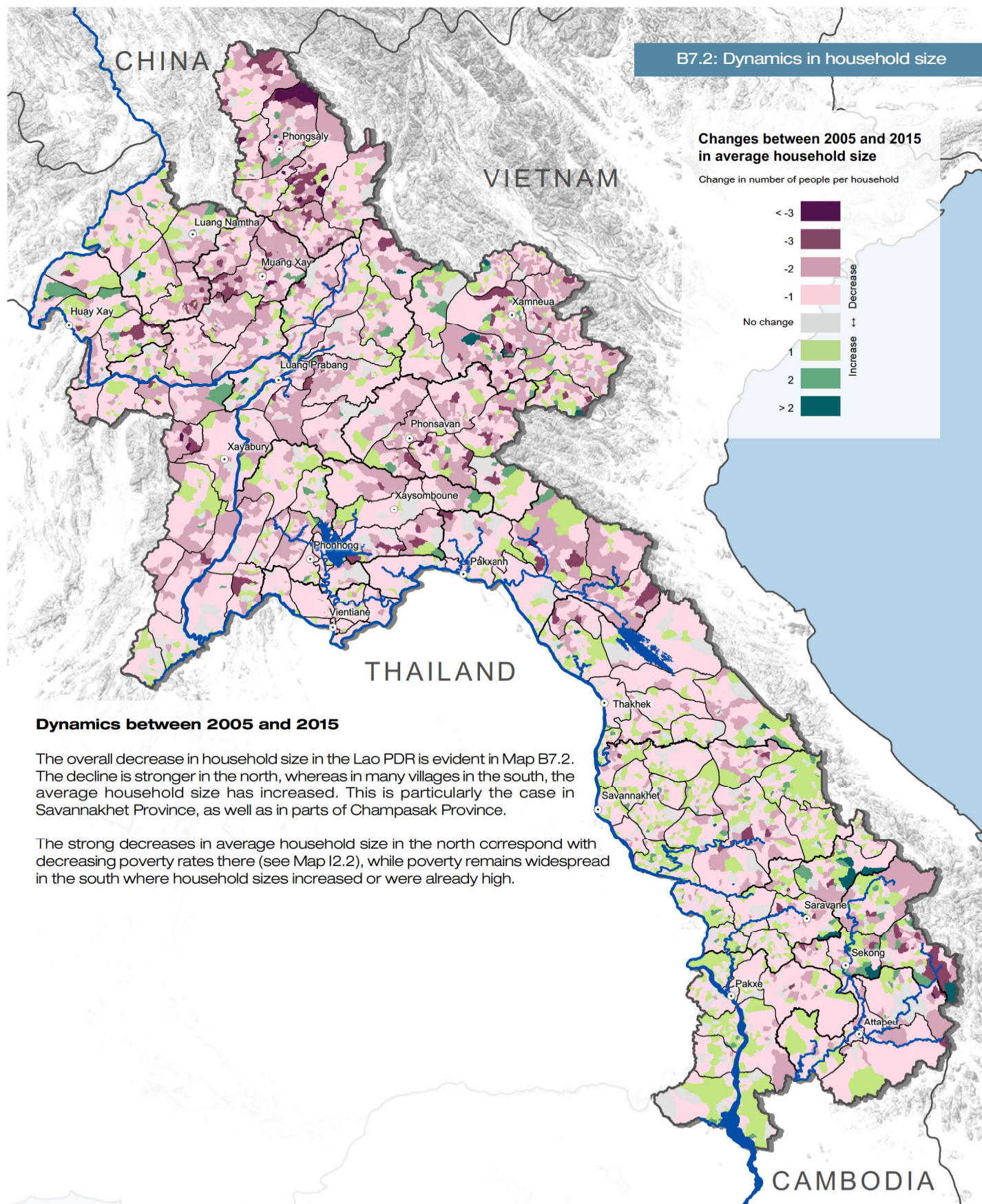
A household is composed of people who share a common living arrangement or residence, and can include both people in the family or outside of it but nevertheless residing together. The size and the composition of a household ranges from one person up to an extended family of multiple generations living together.

The number of households in the Lao PDR increased between the last two censuses by around 25%. During the same time, the population of those households increased by only 14%, resulting in a decrease in the average household size from 5.9 to 5.3 people per household.

### Spatial patterns in 2015

The size of households ranges significantly across the country, as illustrated in Map B7.1. Generally, households tend to become larger the further south one moves, although there are quite a number of villages along the border with Vietnam in Huaphanh and Xiengkhuang Provinces with comparatively large average household sizes. Areas with large average household sizes stretch from southern Savannakhet Province through central Saravane all the way through Sekong Province. These areas are predominantly inhabited by people of the Katuic ethno-linguistic category (refer to Map F2), and correspond to areas with a relatively high young-age dependency ratio (see Map B3.2). Those areas with larger average household sizes are typically among the poorest in the country (refer to Map I1.1).





**Dynamics between 2005 and 2015**

The overall decrease in household size in the Lao PDR is evident in Map B7.2. The decline is stronger in the north, whereas in many villages in the south, the average household size has increased. This is particularly the case in Savannakhet Province, as well as in parts of Champasak Province.

The strong decreases in average household size in the north correspond with decreasing poverty rates there (see Map I2.2), while poverty remains widespread in the south where household sizes increased or were already high.



