

Research Article

Current Status and Trends with Education in Vietnam: Evidence from Three Population Censuses

Linh Cu Le¹ and Lan Hoang Vu²

¹Department of Graduate Education and Department of Demography, Hanoi School of Public Health, Hanoi, Vietnam.

²Department of Epidemiology – Biostatistics, Hanoi School of Public Health, Vietnam.

Email: leculinh@gmail.com ; lcl@hsph.edu.vn

Abstract

This paper aims to establish some basic national indicators on education and training in 2009, the variation of these indicators by socio-demographic factors and to evaluate the trends of these indicators over the last 20 years, using 3 census data collected in 1989, 1999 and 2009 in Vietnam in order to draw out preliminary policy implications.

In general, basic indicators on education and training in Vietnam showed a rather optimistic picture. The literacy rate in 2009 is 93.5%. However, the contrast between males and females, urban/rural, Kinh versus other ethnic groups was repeatedly found in all of the indicators. The three consecutive census data of 1989, 1999 and 2009 suggested an improvement in all educational indicators. However, the ethnic minorities are still far behind the Kinh people. Vietnam is faced with a major challenge due to a very low level of highly qualified population. Only 5.4% of the population aged 25 and over had high educational attainment level. It is clear that even with the overall improvement of literacy rate and primary education in Vietnam, gaps between geographical regions, rural / urban settings and ethnic groups are still the national concern.

Overall improvement of the literacy rate and primary education coverage in Vietnam are significant achievements. Also, in order to seize the opportunity of the population bonus and become more competitive in the global economy, priority should be made to improve the high educational attainment, such as the technical/vocational and university education system.

Keywords: educational attainment, literacy, population census, Vietnam.

Introduction

As noted by the Nobel Laureate, Theodore Schultz, the welfare of people in developing countries is not determined by space, energy or arable land, but by enhancing the quality of the population and the advance of knowledge [1]. Educational achievement is considered as being fundamental to progress in human development. The Vietnam Population and Housing Census in 2009 (VNPHC2009) was conducted under the Prime Minister's Decision No. 94/2008/QĐ-TTg dated 10 July 2008 and used 00.00 hours of 1 April 2009 as the reference time. This was the fourth national population census ever conducted in Vietnam since 1975 [2]. The purpose of this census was to collect basic information on population and housing of the Socialist Republic of Vietnam for national development planning. In addition to several other major issues covered in the national population census, education and its indicators have been one of the main interests in the VNPHC2009. The complete census results, at this moment, are still far from ready to be publically released. One of the main interests that caught attention of many ministerial level agencies, international community as well as researchers and implementers is education and training situation in Vietnam, based on the census data. Vietnam is currently experiencing rapid economic and social changes and similar to other developing economies, education and training plays a crucial role to the development of the country. Therefore, in order to develop relevant policies for education and training activities, we need to quickly grasp the sense that the most recent national data can provide. Built in to the VNPHC2009, a 15% sample survey was also carried out. With the availability of that sample survey data, researchers and policy makers can describe the general overview of education status in Vietnam. Together with other additional sources of data (e.g. other sample survey data of previous population censuses in 1989 and 1999, living standard surveys, etc.), it is expected that research team can quickly provide some understanding of key issues of the education indicators at national level in Vietnam. It is also expected that this data analysis exercise can shed the light on the trend of education indicators in Vietnam over the past 20 years.

Objectives

- To estimate some basic national indicators on education and training in 2009
- To examine the variation of these indicators by socio-demographic factors
- To evaluate the trends of these indicators over the last 20 years, comparing 3 census data collected in 1989, 1999, and 2009 in order to draw out preliminary policy implications for potential policy and strategy development in Vietnam.

Methods

This paper used several sources of data both in the framework of national population census and other relevant survey sample datasets. The three census datasets used were quite complex and based on the multi-stage cluster sampling approach. They include: 1) Vietnam Population and Housing Census 2009 (VNPHC2009) sample data as the main source of data for analysis; 2) The 3% sample survey data of the Vietnam Population and Housing Census 1999; 3) The 5% sample survey data of the Vietnam Population and Housing Census 1989: this survey was similar to the 2009 and 1999 sample surveys built-in to the full census and it was the first of its kind.

VNPHC2009 was conducted under the Prime Minister's Decision No. 94/2008/QĐ-TTg dated 10 July 2008 and used 00.00 hours of 1 April 2009 as the reference time. This analysis was based on the

15% sample survey of VNPHC2009 (from now on would be called: “VNPHC2009” data for short) was processed directly after the completion of the census fieldwork. Household and individual information was sorted out into two distinct data files. The majority of the analysis steps involved the individual file only. It was however linked up with household level file when needed.

Using the sample weighting scheme allows us to extrapolate the percentages, proportions and rates to make them nationally representative with the whole population of 85,789,573 individuals in Vietnam. Further description of this sample survey conducted by General Statistical Office of Vietnam was described elsewhere [2].

All variables examined in this study are basis demographic and socio-economic variables, as well as indicators on education and training that have been published for years and widely used over the last 20 years of census sampling survey. Major outcome variables are as follow:

- Proportion of on-going, drop out and never-attending school
- Literacy situation: A person is considered as literate if that person is able to read, write and understand fully a simple statement in Vietnamese or an ethnic or foreign language. Similarly, illiterate defined as a person cannot do so.
- Literacy rate of population aged 15 and over was the percentage of people aged 15 and over who are literate relative to the total population aged 15 and over.
- The highest education & training levels attained: Proportion of population attaining highest level of education as primary school, lower secondary school, higher secondary school and higher
- The highest professional and technical qualifications attained: Proportion of population attaining highest level of technical qualification as: Short-term training, Vocational degree, College level, Bachelor and higher level.
- For the purpose of comparison some educational attainment indicators between Vietnam and other countries, we decided to use the International Standard Classification of Education (ISCED) - designed by UNESCO in the early 1970's and widely accepted worldwide [3]. A shortened form of this classification was used, in which the *low educational attainment level* refers to incomplete primary education, primary education (ISCED 1) and lower secondary (ISCED 2); *medium educational attainment level* refers to upper-secondary (ISCED 3) and post-secondary non-tertiary (ISCED 4); *high educational attainment level* refers to tertiary (ISCED 5 and 6). Note that these indicators were calculated for the population aged 25 and above.

The indicators on education/training in 2009 were estimated for national level, regional level using appropriate numerator and denominator. All the estimation took into account the survey weights of study subjects provided by GSO in each datasets. Tabular and graphical techniques were used to analyze and present the data as graphs, tables, and maps when appropriate. Cross-tabulation technique was used to examine the differentials in all basis indicators on training/education by these above mentioned demographic and social economic factors. Chi-square test was used to see whether these differences are significant or not. Data manipulation and analysis was performed using SPSS version 18.

Results

Literacy, school attending status and highest educational attainment

As described above in the methodology section, the key literacy and school attending status of the population of Vietnam was summarized in the following table (see Table 1). The key indicator of

literacy rate (for population aged 15 and over) of Vietnam in 2009 is 93.5%. Of the population aged 5 and over, 24.7% are attending school, 70.2% have attended school and only 5.1% never go to school.

Table 1. National indicators of literacy and school attendance status.

Indicator	Male	Female	All
Literacy rate of population aged 15 and over	95.8%	91.4%	93.5%
Attending school rate of population aged 5 and over	25.8%	23.6%	24.7%
Attended school rate of population aged 5 and over	70.7%	69.7%	70.2%
Never go to school rate of population aged 5 and over	3.5%	6.7%	5.1%

The contrast between males and females and urban/rural was also shown in Table 1. Not surprisingly, the literacy and school attending indicators was a bit better in male population. Similarly, the situation is better in urban settings, especially in the forth indicator: “never go to school”. These indicators were presented in Figure 1, in which gender difference was showed, together with urban/rural, ethnicity groups and migration status. This figure depicts a big gap between Kinh (ethnic Vietnamese) and other minority groups in the proportion of the sample never go to school (only 3.1% in Kinh group versus 17.5% in others). The contrast between different group of migrants and non-migrant also suggests that those people who are mobile (intra-provincial and in-migrants) are more likely to have higher literacy.

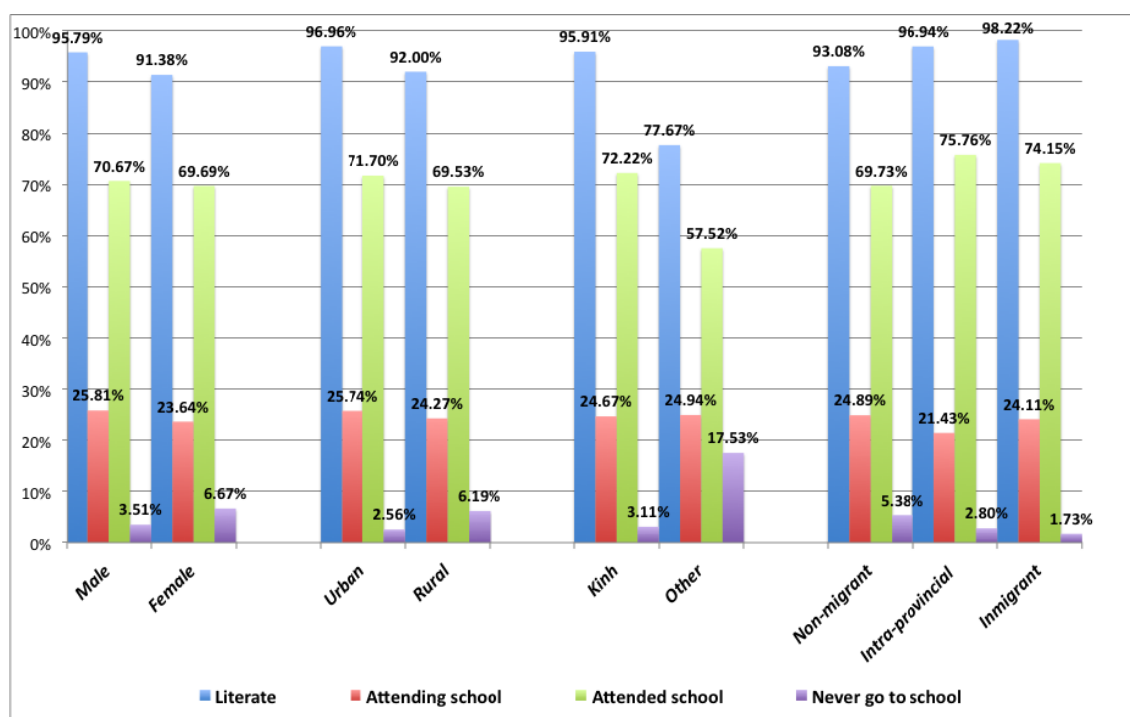


Figure 1. National indicators of literacy and school attendance status.

Figure 2 shows a comparison across age groups and sexes. The gap between females and males is largest in the oldest age group and much less in younger generation. The proportion of females aged 65 and over never go to school is 26.1% (versus 7.5% in males same age group) while this proportion in females aged 20-24 is only 3.6% (versus 2.6% in males).

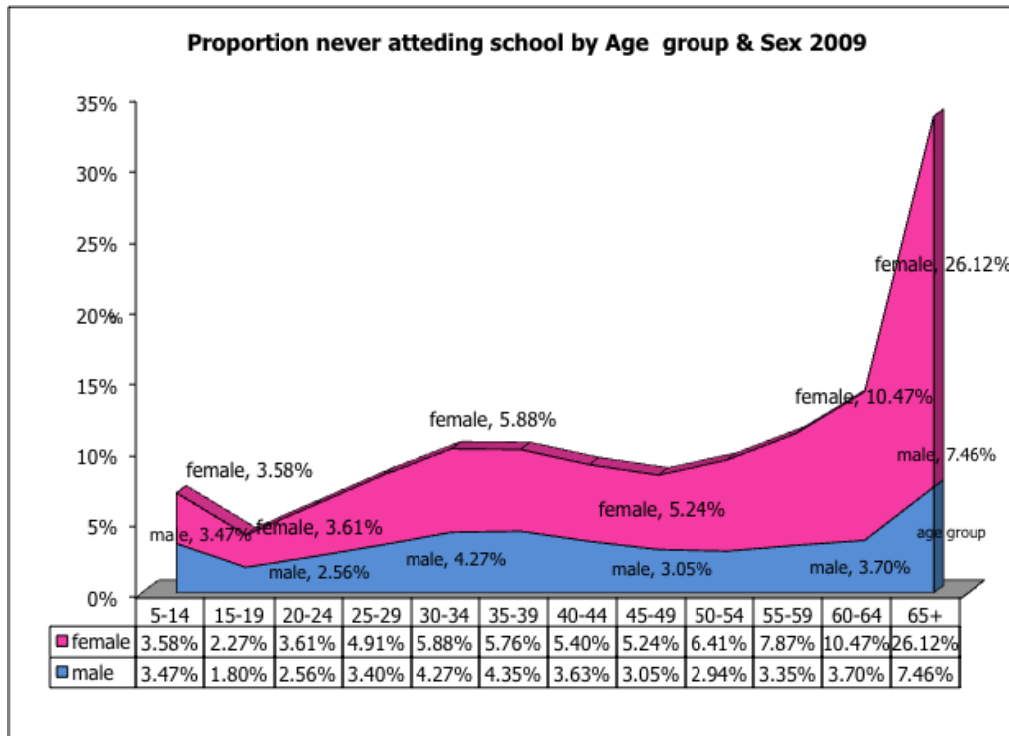


Figure 2. Population never attending school by age group and sex.

Figure 3, then shows a comparison of adult literacy rate across ASEAN countries. The data from other countries was drawn from latest available statistics published in 2008 [4], combined with VNPHC2009 data from Vietnam. The rates show that Vietnam has a better literacy rate compared to the Philippines, Laos, Cambodia and Indonesia.

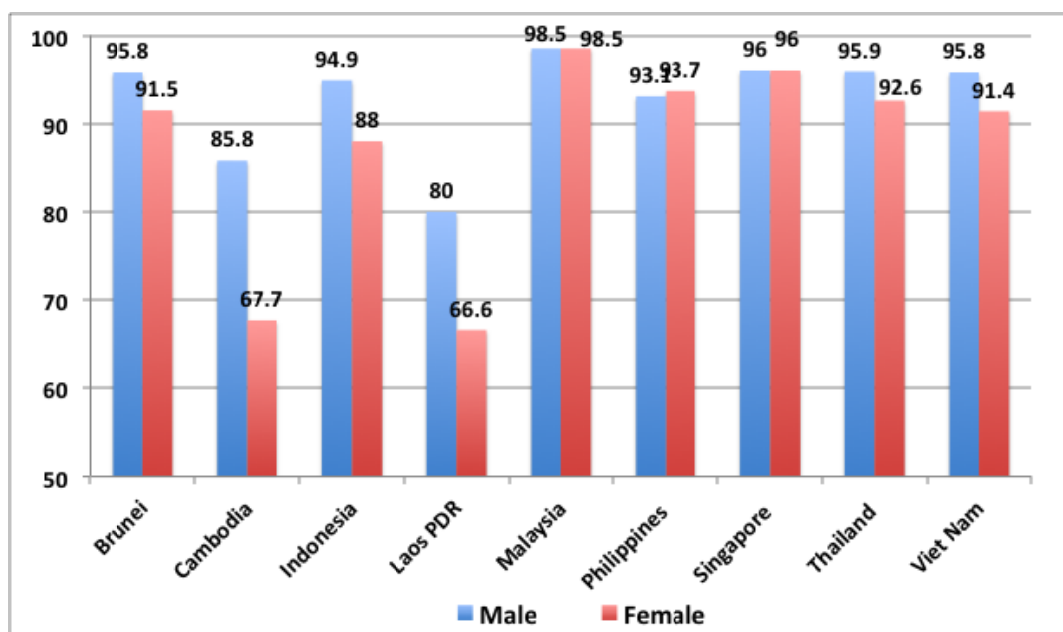


Figure 3. Adult literacy rate of ASEAN countries (data not available for Myanmar).

The next group of indicators is highest education attainment, which shows the percentage of population who have not completed primary school, completed primary school, completed secondary school and people completed high school and higher. Table 2 shows these indicators in Vietnam population aged 5 and over for each sex. In general the proportion of higher educational attainment in males is higher than in females. For the urban/rural gaps, the most significant difference is the percent of population completed high school and higher: 37.4% in urban versus only 13.8% in rural areas (almost 3 times difference).

Table 2. National indicators of highest educational attainment by gender.

Indicator	Male	Female	All
Percent population not completed primary school	21.2%	24.2%	22.7%
Percent of population completed primary school	27.8%	27.4%	27.6%
Percent population completed secondary school	24.3%	23.2%	23.7%
Percent of population completed high school and higher	23.2%	18.5%	20.8%

Human capital of the “golden population structure”

Recently, the population structure of Vietnam characterized by the low dependency ratio (less than 50%), high proportion of young and economically active age groups has been discussed [5]. It is referred to as the “population bonus” and some also emphasized this is a unique opportunity for Vietnam as this “golden population structure” would not last forever. However, in order to get benefit from this population structure, it is critical that the young and most-productive age groups are well equipped with knowledge and technical skills. International perspective looked at the age group 25 years and over as the cut off, with the assumption that before reaching the age of 25 the individuals had gone through all basic education levels as well as technical qualification / university training. It is argued that even touch Vietnam has done rather well in term of achieving primary education

coverage and illiteracy eradication (as discussed above), the real challenge is actually how to provide the young people with better qualification technical skills training. This is referred to as the percentage of adults with medium (equivalent to UNESCO classification ISCED level 3 and 4) and high educational attainment levels (equivalent to UNESCO classification ISCED level 5 and 6). These indicators are usually measured as the percentage of adults aged 25 and above who have medium and high educational attainment.

In the past, no data was available in Vietnam to access these indicators and therefore, no comparison is doable. With the VNPHC2009 data, it is estimated that 18.9% of the population aged 25 and over are having medium level of educational attainment based on UNESCO international standard. Selected countries were used to compare with Vietnam in Figure 4, in which the HDI rank is presented on the left axis next to the country name. For reference the country with top HDI ranking (Norway), data from high, middle and low income countries were also compared with Vietnam. All other countries data were extracted from UNESCO statistics [6], Vietnam data was from VNPHC2009. Importantly, only 5.4% of the population age 25 and above reached the high educational attainment. As discussed in the latest Human Development Report (HDR) 2009 by UNDP, these indicators are inter-correlated with the overall education achievement of the countries and Human Development Index ranking (HDI) [7].

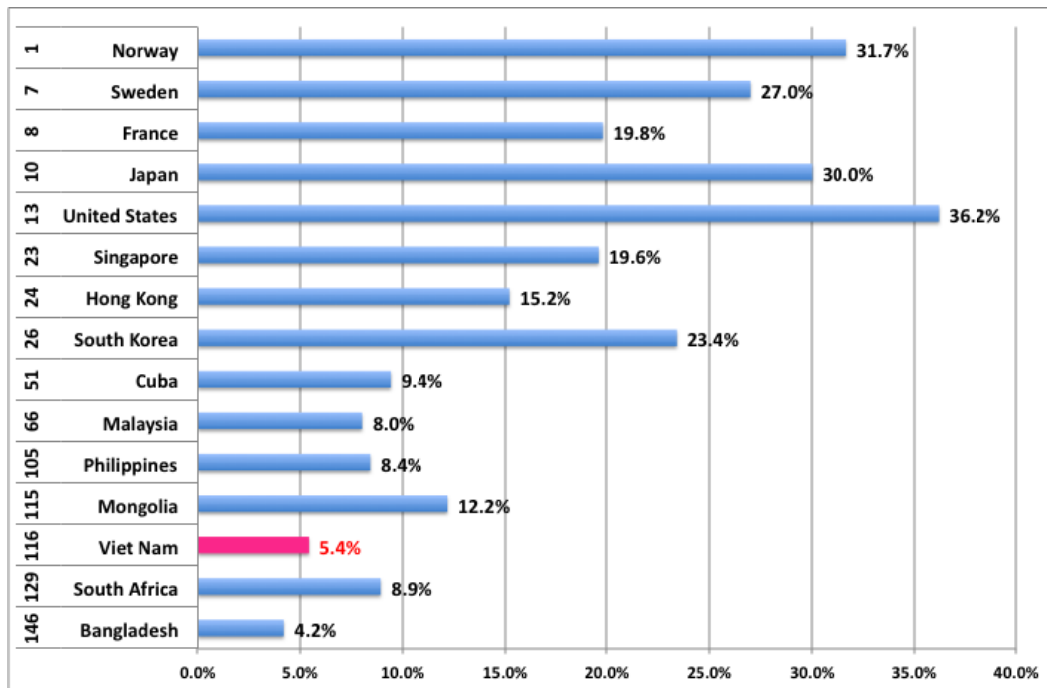


Figure 4. Percentage of adults with high educational attainment levels (% aged 25 and above)

The gap between Vietnam and high income countries is significant. Importantly, the rate of high level of attainment in Vietnam is even lower than some countries at lower HDI ranking (such as South Africa). Both rates in Vietnam is lower compared to ASEAN countries in the region with available data. This is big concern as the population with high level of educational attainment would be the pool for human capital of Vietnam. With such low level of highly qualified population, Vietnam has been facing with significant challenge for the economic development and social reforms. This

situation, when aggregated by rural / urban, clearly indicates the gap. The majority of rural population have low educational attainment (84.5%), 13.6% have medium and only 1.9% have high attainment (versus the rates in urban sample at 56.2%, 30.5% and 13.3% respectively).

Changes in the last three censuses: trends at national level

Using three consecutive census data sets of 1989, 1999 and 2009 gives us the chance to look at the changes over time. Not surprisingly, the trends presented in this section showed the improvement in almost all educational indicators at national level. Figure 5 shows the trends by sex. The difference between males and females has been narrowed down, from about 10 percent point in 1989 down to 7 percent point in 1999 and now at about 4 percent point only. The gap between Kinh and other ethnic groups, however, has not been improved that much. That rate in Kinh people decreased about more than 2 times after 20 years but it decreased only about one third in the minorities.

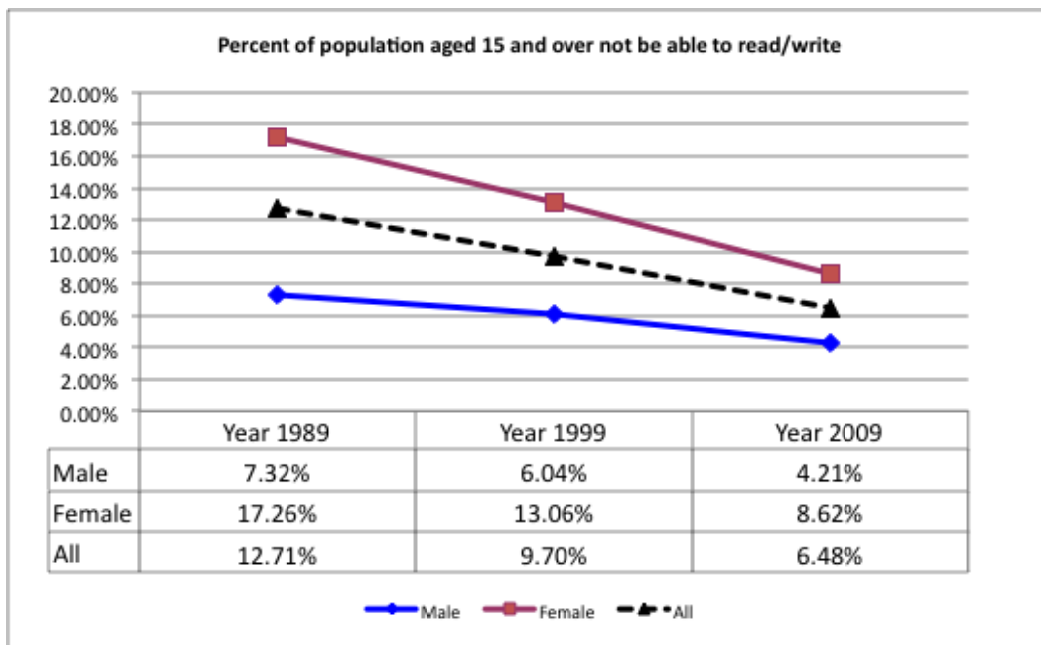


Figure 5. Trend over time: percent of population aged 5 and over cannot read/write by sex.

Similar to national level, Figure 6 presents the trend in proportion of population aged 15 and over who had college degree (or higher) by sex and urban / rural difference at the regional level. This graph also suggests a trend of increasing gap between urban and rural settings in Vietnam. The overall pattern is urban population (especially urban males) had a better progress over the last 20 years compared to their rural counterparts in all 6 regions. Males (all regions) had a better professional qualification over time, compared to females. It is also clear that the females in rural areas are left behind compared to all other groups, include the females in urban settings, however the gap in rural areas is much less than in urban areas.

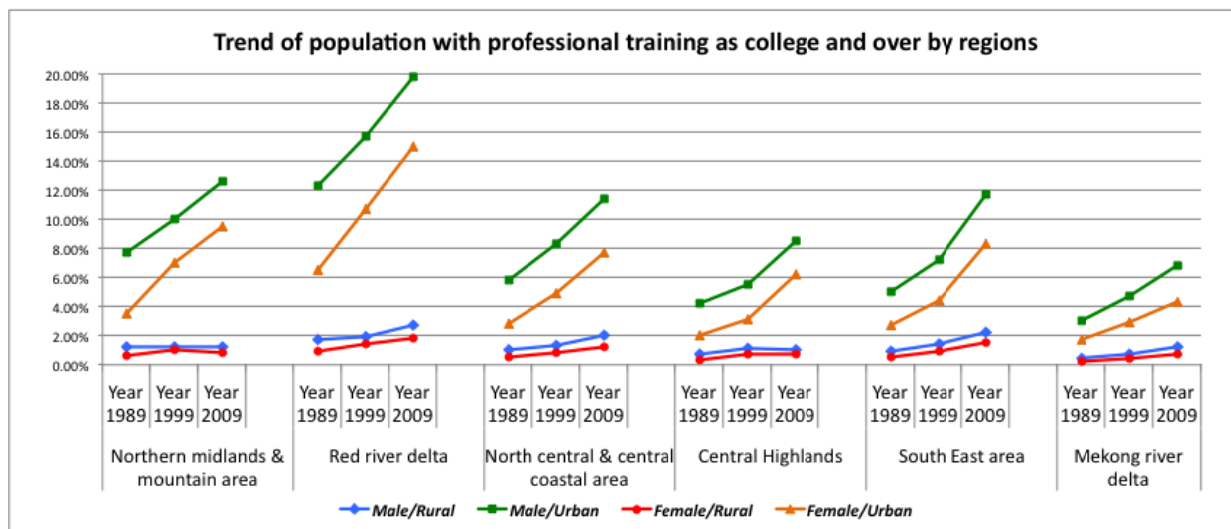


Figure 6. Trend at regional level: population aged 15 and over who had college degree or higher, by urban/rural and sex.

Discussion

At the first glance, basic indicators on education and training in Vietnam based on the VNPHC2009 quantitatively showed an optimistic picture. The literacy rate (for population aged 15 and over) in 2009 is 93.5%. Of the population aged 5 and over, 24.7% are attending school, 70.2% have attended school and only 5.1% never go to school. Not surprisingly, the literacy and school attending indicators was better in males versus females. Similarly, the situation is better in urban settings (versus rural areas), and in Kinh group (versus other ethnic minority groups). Regarding the highest education level and degree of professional and technical qualification, the findings show a rather low proportion of the population received high qualification level, only 1.6% received a college degree, 4.2% received at bachelor degree and 0.21% reached post graduate level. Importantly, the contrast between males and females and urban/rural was repeatedly found in all of the indicators and in favour of males and the urban population. In general, the proportion of higher educational attainment in males is higher than in females, higher in urban versus rural areas (37.4% in urban versus only 13.8% in rural areas - almost 3 times difference). It is clear that rural females are the group with lowest qualification in comparison with other groups: only 1.23% rural females aged 15 and over had bachelor degree or higher (versus 1.87% in rural males, 9.1% in urban females, and 12.67% in urban males).

With regard to regional differences, literacy rate and other basic education indicators showed the clear contrast between the most disadvantaged mountainous regions (Northern mountain and Central highlands) and the more developed areas, particularly the Red river Delta and the South East.

The analysis using three consecutive census data sets of 1989, 1999 and 2009 suggested the improvement in all educational indicators at both national and regional level. However, the ethnic minorities are still far behind the Kinh people, and the progress was also found better in males, in urban settings in comparison with the females and the rural counterparts. In fact, for several regions (particularly the up-north and central highlands) the illiteracy rate in 2009 of the rural females was

similar (or even higher) to that rate in rural males 20 years ago. Left behind the Kinh majority, the educational qualification of other ethnic groups is still a challenge that Vietnam is facing at the current stage. The relationship between slower progress of educational background and socio-economic achievement in those disadvantaged regions (in which the ethnic minority groups are dominant) suggested that higher priority policy/ intervention programs implemented to reach that target group will help to solve the situation.

The analysis of medium and high educational attainment percentage showed that Vietnam is faced with the big challenge of a very low level of highly qualified population. Only 5.4% of the population aged 25 and over had high educational attainment level is a remarkably low rate. It is realistic to say that the burden for low and medium level of educational system will gradually decrease over time. However, to meet the critical need of improving the technical qualification and professional training to enable the young population to attain high level of education, the government may need to pay much more attention to the university and technical education system. This will be the appropriate action to seize the opportunity of the young population structure and to become more competitive in global economy.

Conclusion

It was found that Vietnam is on the right track in achieving universal primary education, with very positive indicators. However, big gaps were seen across regions and urban-rural settings, especially, when taking gender into account. Therefore, if the Government's appropriate policies to improve educational and technical and professional qualification of those who are living in rural settings and in less developed province would be a driving force for the reduction of inequality in education and improvement of the educational indicators in disadvantaged provinces of the country.

In order to seize the opportunity of the population bonus and to become more competitive in the global economy, more efforts should be made by the Government to improve the technical/vocational and university education system.

Acknowledgements

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