Labour Capacity Preparation in Thailand and in Vietnam

Phasina Tangchuang, Ph.D.* phasina@yahoo.com

Abstract

The purpose of this article is to examine labour capacity preparation between Thailand and Vietnam through an integrated literature review and fieldwork research. It was found that during the last 30 years before the 1997 crisis, Thailand had been far ahead developed than Vietnam. But from the late 20th century on, Vietnam seems to develop something ahead of Thailand, especially the quality of labour capacity preparations, and stable long plan strategies. These make Vietnam interests to FDI and GDP growth continuously with around 7-8 percent yearly since the last decade, while it has been decreasing in Thailand.

This paper presented some comparison findings on labour capacity building between Thailand and Vietnam during 1980-2025.

Keywords: labour capacity preparation, quality of education

^{*}Associate Professor and Scientific Manager for JEAI-CELS, Faculty of Education, Chang Mai University.

The author would like to express his thanks to TRF and Royal Thai Embassy, Hanoi for supporting this study and to facilitate meetings with entrepreneurs in Hanoi. Thanks to Dr. Xavier Oudin, IRD who always sacrifices his time to hand-in-hand undertaking studies with the author.

Introduction

Thailand and Vietnam are both members of ASEAN. Thailand had been developed 20 years before Vietnam where busy with civil war. But since the late 20th century on when *"doi moi"* was launched, Vietnam has been steadily developed, and GDP growth. More foreign directed industries are interested in investing in Vietnam. Thus, there are some questions i.e., to what extend Vietnam interests to FDI? How are the differences of labour capacity preparation between the two countries? To understand the questions profoundly, the paper, thus presents some comparison related statistics.

Population

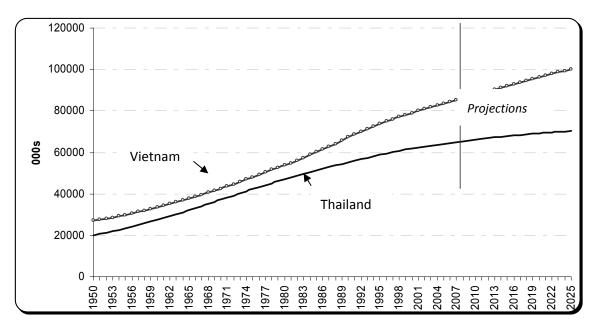
One hundred years ago, the population of Vietnam was around 19 million, while the population of Thailand was 9 million or less than half the one of Vietnam¹. After World War II, the population of Vietnam was 26 million, the one of Thailand 17 million or two thirds of the one of Vietnam. Up to the beginning of the 1970s, Thailand had a faster demographic growth than Vietnam and nearly caught it up.

Both countries had a rapid growth of population, characterised by a strong mortality and a very high fertility. Peaks in mortality due to the wars and starvation did not alter the rapid growth of population for many years. Fertility was higher in Thailand, and mortality lower. In Vietnam, starvation after the Japanese occupation, then two successive wars raised the mortality, and stroke mainly men in reproductive age.

Thailand started its demographic transition (drop in mortality followed by a drop in fertility) earlier than Vietnam. In 1975, the population of Thailand was about 90% of the one of Vietnam (42 million in Thailand, 48 million in Vietnam). After 1975, the rate of growth of Thailand's population started to decrease, while in Vietnam, it was still high. Therefore, Vietnam population has grown more rapidly than the one of Thailand since that date and will continue to do so a few decades. In 2007, Vietnam's population is at 85 million, 20 million higher than the one of Thailand.

¹ - Source for Thailand: The Survey of Family Registration 1909, Ministry of Interior, published by NSO; for Vietnam: Banens (http://www.ier.hit-u.ac.jp/COE/Japanese/discussionpapers/DP98.7/ Append2.htm)

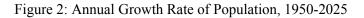
Figure 1: Total Population, 1950-2025

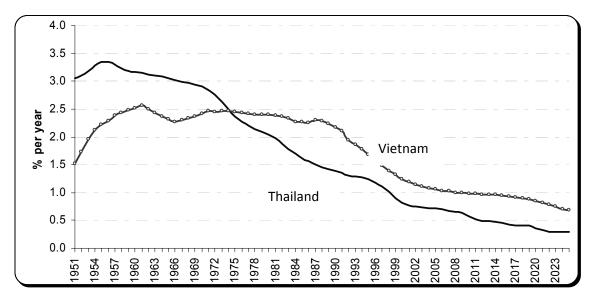


Source: For Thailand: CELS database, based on US Bureau of Census and United Nations Demographic Yearbook (historical supplement). For Vietnam: US Bureau of Census.

Projections show that Thailand's population will reach its maximum in 2020 at 72 million, while Vietnam population should continue two or three more decades. In 2050, the population of Vietnam is expected to reach 108 million and stabilise at that level, while at that time, Thailand's population might slowly decrease and be around 70 million. In 2025, the gap between the two countries will be over 30 million, and in 2050, Vietnam will have a population 50% higher the one of Thailand (US Bureau of Census).

These dynamics of population are rendered by the annual rate of growth of population. From the beginning of the eighties up to 2025, the rate of growth of population of Vietnam is regularly 0.5% higher than the one of Thailand. This difference is quite important and explains differences in the age structure of population between the two countries.





Source: Same as figure 1

Age structure of population

Vietnam never had a demographic rate of growth as high as the one of Thailand in the 1950s and in the 1960s. Fertility reached very high levels in Thailand at that time and suddenly decreased, from 7 children per woman to less than 2 at the turn of the century. In Vietnam, the decrease of fertility was smoother, although it accelerated in the last decade.

As a consequence, the age structure of the two populations has followed different trends. As Thailand had a fall in fertility earlier and stronger than in Vietnam, ageing of the population was more sudden and stronger, when the cohorts born in the 1950s and in the 1960s became older.

In Thailand, the younger part of the population (under 15) constituted 45% of all population in the sixties. As a consequence of the dramatic fall of fertility during that decade, the share of the population in the following decade fell to 25% in 2000 and continues to decrease slowly to stabilise around 20% in following decades. Conversely, the share of old people (60 years old and over) was under 5% in the sixties, has reached 10% in 2000 and will reach 20% around 2030.

Although the trends for Vietnam are similar, with a lag of a few years, they are less pronounced and this difference is enough to modify the impact of the age structure on the economy. The share of below 15 started to decline slowly from 1970, while the ageing of the population, as shown by the share of those aged 60 and over in the population, is much slower than in Thailand.

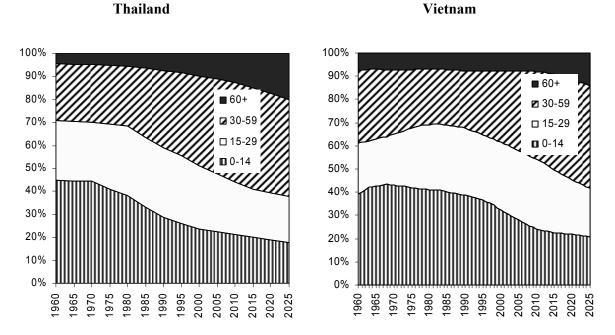


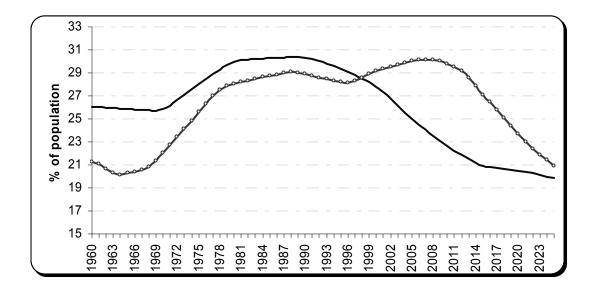
Figure 3: Distribution of Population by Age, 1960-2025

Source: Same as figure 1

The most favourable aged structure can be summarised by the share of the age category 15 to 30 in the population. This age category is the most dynamic, the one where morbidity and mortality are at their lowest level. Young workers tend to accept lower wages and be more productive, they are more mobile and more receptive to innovation. This proxy, when observed on a long period, only shows periods in which the structure of the population can be an advantage. The comparison between two countries shows period where one country has a relative advantage as compared with the other. The one which has the higher share of population in the age range 15 to 29 has a comparative advantage.

Figure 4 shows that Thailand had a comparative advantage up to 1998. From that year, it is Vietnam where the population age structure becomes more favourable, and the share of population aged 15 to 29 is nearly 8% higher than Thailand around the year 2010. It means that in the present and next decade, Vietnam can draw some benefit form having a younger work force. It also means that less will have to be spent in public health and social security in Vietnam than in Thailand. In addition, the share of old people, who are more costly for public health, will be higher in Thailand.

Figure 4: Share of 15-29 years old in total population, 1960-2025



Source: Same as figure 1

It is only around 2030 that the share of population aged 15-29 years old in the total population of Vietnam and Thailand will become similar again, at a level below 20%. A its peak, the difference between the two countries is striking: with a population 30% higher, Vietnam will have nearly twice more persons aged 15 to 29, but one million less old persons than Thailand².

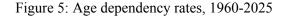
Having a higher proportion of young people in the population is also a big burden in terms of education and training. With a higher share of people in their twenties, Vietnam will have to spend much more in higher education and vocational training. If it does not do so, there is a risk of having a poorly skilled workforce, unable to promote economic growth, or a high rate of unemployment. This is already a major problem in Vietnam.

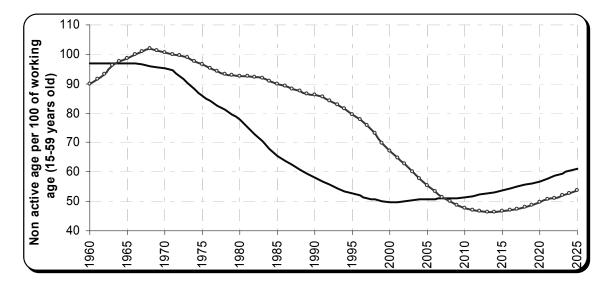
The analysis can be extended using age dependency rates. This indicator measure the number of people not in working age, that is children below 15 and old aged 60 or more, for one hundred in working age (15 to 59 years old). A high dependency rate means that a high share of national resource must be devoted to feed, educate and heal non active population. This resources are thus diverted from more productive sectors. At the family level, it is difficult to

 $^{^{2}}$ - According to the projections of the US Bureau of Census, the population aged 15 to 29 will be 26.2 million in Vietnam and 14.9 million in Thailand in 2010. The number of persons aged 60 and over will be 7.1 million in Vietnam and 8.3 million in Thailand at the same date.

face the costs of education for many children, not to speak of health and food expenditures. As soon as they can, especially in farm households, children are required to participate to the production. When families become less numerous, more resources can be used for education per child, and more for consumption of the families. In addition, it is more likely that families with fewer children will be able to save and to invest for the future. The same applies at the nation level.

Non working age population is mainly constituted by young children up to the eighties, for both countries. The main burden for society is therefore education, primary and secondary. For Thailand, the decline of the dependency rate from 1970 coincided with the boom in school enrolment. Thailand (i.e. the State as well as the households) took benefit of the decline of the dependency rate, that is the fact that there were less children of school age per family, to boost school enrolment. In 2000, Thailand had achieved universal education up to the age of 15, and school or higher education enrolment after 15 is becoming high.





Source: Same as figure 1

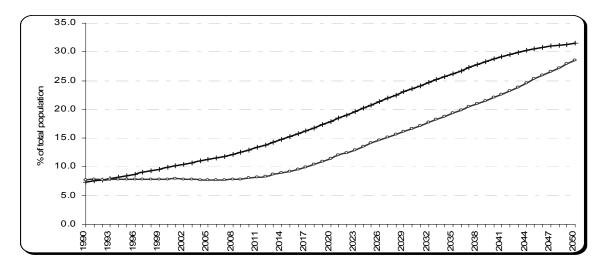
It can be seen that the economic boom in Thailand coincides with a strong decline in age dependency rates. It does not mean that this was a factor that directly determined the economic growth. But it is an indicator of a more favourable situation in terms of human resources. In the present periods, age dependency rates tend to rise again, due to the growth of old age categories. The burden that Thailand is facing now is taking in charge this

population of ageing people. More resources must be devoted to pay pensions, health cares, etc. to the ageing population. Vietnam faces the same problem, but at a lower pace.

Ageing of the population

Differences in age structure of the population and related indicators as the dependency rate are nowadays and in coming decades mainly due to a major phenomenon which is the ageing of population. As Thailand started its demographic transition earlier, and as the fall of fertility was steeper and shorter, ageing is also more sudden when generations born before the fall of fertility come to old ages. The share of population aged 60 and over has started to increase several decades ago, due to the progress of medicine and the fact that life expectancy was gaining many years. But this share is now increasing at a rapid pace, due to the fact that numerous cohorts born before the fall of fertility are now reaching old ages.

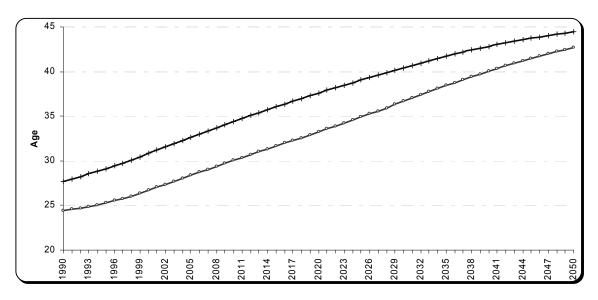
Figure 6: Share of Population aged 60 and over in Total Population of Population, 1990-2050



Source: US Bureau of Census, International Database

From now and in the coming decades, Thailand will face a much higher burden than Vietnam in taking care of its ageing population. The share of the population aged 60 and over is, in 2007, 12%, as compared with 8% for Vietnam. It will reach 20% in 2024, meaning that at that time, nearly all Thai families will have an old person at charge. Vietnam only lags a dozen years behind Thailand. It also faces a rapid ageing of its population after 2010. But the differences between the two countries will remain long. In other words, Thailand will have to devote much more resources to pensions and healthcare for the old age population in higher proportion than Vietnam and its other neighbours (except Singapore).

Differences in the age structure and ageing in the population are well rendered by the mean age of population. If both countries have the same trend of a rapidly ageing population, Thailand has a population aged 3 to 5 years more than the one of Vietnam for half a century. This difference has a strong impact in many fields, starting with the labour force, but also in term of sustaining old age population, mentality, view of the future, etc.





Source: US Bureau of Census, International Database

International migrations

The demographic situation should have different impact on international migration from Thailand and Vietnam. However, migrations are probably more

Nowadays, some 500,000 Thai workers work outside the country³, mainly in the Middle East, and East Asia (in Singapore, Hong Kong or Taiwan⁴, South Korea and Japan). There are also Thai communities expatriated in the US and in Northern Europe. Although there are official programmes ran by the Ministry of Labour to promote work abroad and protect Thai workers

³ - See Graeme Hugo, in Douglas S. Massey, J. Edward Taylor (eds.) International Migration Prospects and Policies in a Global

⁴ - 130,000 in Taiwan in 2001, Asian Migration Review, cited by Supang, in Iredale, Castles and Hawksley.

abroad, there is not, in Thailand, a policy of sending workers abroad on a great scale. Besides, Thailand is a recipient for 3Ds migrant workers. Estimates range from two to three or more millions migrant workers being in Thailand.

This is not the case in Vietnam, where tensions on the labour market are higher. Though not on the same scale than the Philippines, the Vietnamese Government has set up programmes jointly with recipient countries in order to expatriate Vietnamese workers. This policy aims at bringing revenue to the country through workers remittances. Such a policy was already done on a large scale when Vietnam was linked by economic agreements with communist countries of East Europe⁵. At that time, Vietnamese workers were utilised to lighten the burden of external debt through special agreements.

Nowadays, Vietnam has re-oriented its policy of sending workers abroad to East Asian countries.

It is likely that this policy will be continued and that Vietnam will try to expatriate more workers. The trend in population growth and the difficulty to provide jobs to the young cohorts coming to the age of work will not be released in the two next decades, and it is a great advantage for Vietnam to expatriate workers.

However, the demand of recipient countries for workers will probably shift towards more qualified workers, and it is a challenge for Vietnam to set up training programmes for workers who are candidates for expatriation. The Philippines have already taken this turn (construction workers, sailors, nurses...). The competition for expatriate jobs, that tend to be more and more regulated by recipient countries, will also be more competitive. In some cases, it might concern highly qualified workers (doctors, computer specialists...). Areas of destination might also change, and Thailand might become a major recipient country for Vietnamese workers in 2015.

⁵ - see Robyn R. Iredale, Stephen Castles, Charles Hawksley Migration in the Asia Pacific Population, Settlement and Citizenship Issues; they cite a report from MOLISA saying that 220,000 Vietnamese workers were send to the Soviet Union and Eastern European Countries between 1981 and 1990.

Education, Training and Labour Market

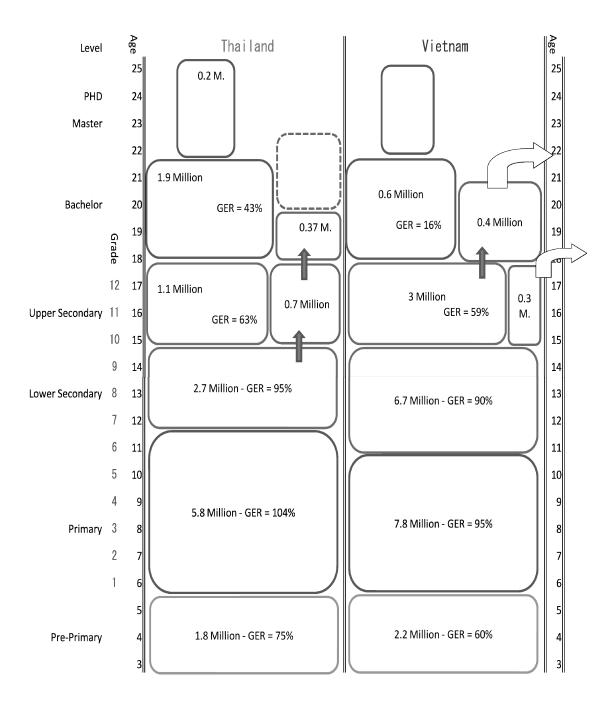


Figure 8: Education Systems

Comparison between Vietnam and Thailand related to enrolment require to have quite detailed statistics, since comparison has to be made grade by grade and age by age. Since the different levels have not the same duration in both countries, and have changed through time, comparison by broad level would be misleading. Gross enrolment rates can be calculated in both countries (although series by age are difficult to adjust). Net enrolment (percentage in an age class which is enrolled in grade corresponding to that age) requires having the age of children at school at each grade. This information is not available and needed for both countries.

UNESCO series that already are adjusted in order to be comparable (but no details on adjustments are available). There are two different series, one from 1975 to 1997 (but many years are missing) and one from 1991 to 2006. Both series are not perfectly consistent.

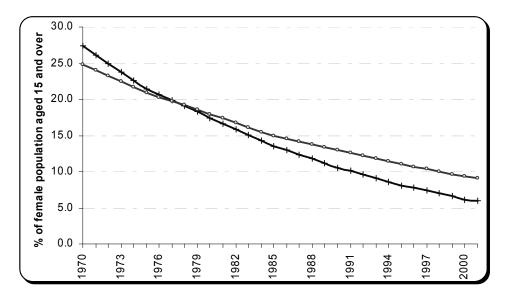
Literacy

Although education can pursue many objectives, one of the first one is to give the capacity to read and write to the population. In countries where the education systems are young, where the scarcity of resources and the demographic impetus were obstacles to the building of a universal education system, the best indicators to measure progress of the level of education of the population is the illiteracy rate. This rate is usually measured for adult population only (15 years and over), and is more significant for the female population is one considers that universal education is achieved only when girls also benefit of the progress in education.

Since the seventies, it can be said that both countries have achieved universal education. In fact, as far as primary education is concerned, it was achieved earlier, but obstacles remained to a real universal education, including in remote areas.

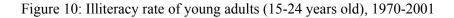
In 1970, the rate of illiteracy of adult women was higher in Thailand than in Vietnam. This rates declines more steeply in Thailand than in Vietnam. When young educated cohorts come to the age of 15, and replace old uneducated cohorts, the illiteracy rates progressively declines. In the case of Thailand, younger generation were relatively better educated than in Vietnam, and/or older generation were relatively less educated (or rather literate) than in Vietnam. Thus, progress is more rapid in Thailand. Around 6 % of the adult female population is illiterate.

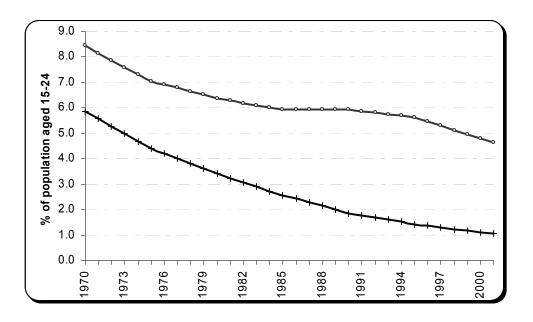
Figure 9: Illiteracy rate of adult women, 1970-2001



Source: World Bank, World Bank Indicators of Development.

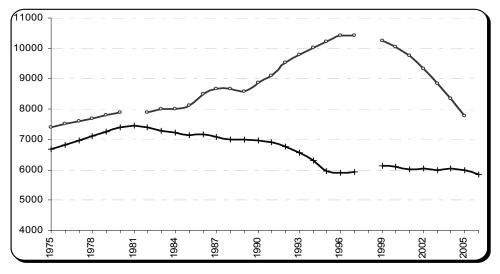
Such an indicator shows the legacy of the education system in the past, since most of illiterate people belong to old generations.

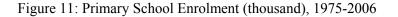




Enrolment

Both countries have achieved universal education in the eighties⁶, and the change in the curves reflects demographic changes. Total enrolment in primary level starts to decline from the beginning of the eighties, while the decline starts 15 years later in Vietnam.



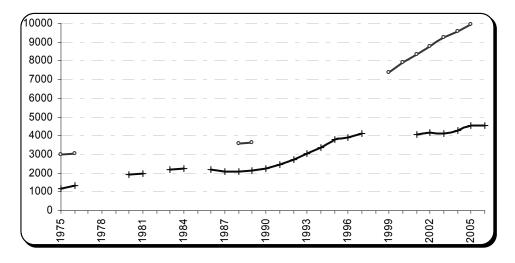


Source: UNESCO and CELS

As for the secondary level, both countries have had a low enrolment up to the end of the eighties. In Thailand, the regulation on compulsory education up to end of lower secondary boosted enrolment, not only at lower secondary level, but also at upper secondary level, including in vocational stream. Within ten years (from 1987 to 1997), enrolment doubled from two to four million pupils. In Vietnam, expansion of secondary education was still more drastic, although it had been quite hectic decades before. At the end of the eighties, there was a sudden drop in secondary school enrolment due to the introduction of school fees (this is not shown in chart below because data are not available in the UNESCO series). From 1990, enrolment in secondary schools exploded. From a likely 3 million pupils in 1990, enrolment reached 10 million in 2005. This constitutes 12% of total pop, as compared with 6% in Thailand. The burden of secondary education is especially high for Vietnamese family.

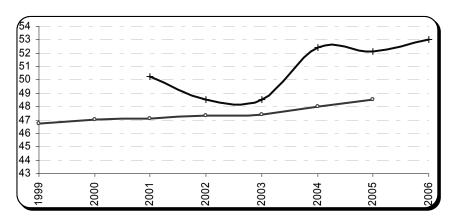
⁶ - In both countries, some remote areas still lack schools or teachers. These areas are inhabited by minorities whose mother tongue is not the official language (see UNESCO reports).

Figure 12: Secondary School Enrolment (thousand), 1975-2006



Source: UNESCO

Figure 13: Share of females in secondary education enrolment, 1999-2006



Source: UNESCO

Although in total, secondary school enrolment in Vietnam are greater than in Thailand, but females in Vietnam have less opportunity to go to secondary education than those in Thailand.

However, those who graduated secondary education in Vietnam have far less opportunity to go to tertiary education than in Thailand since the eighties.

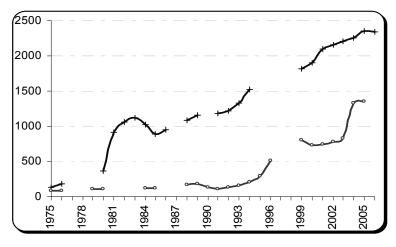


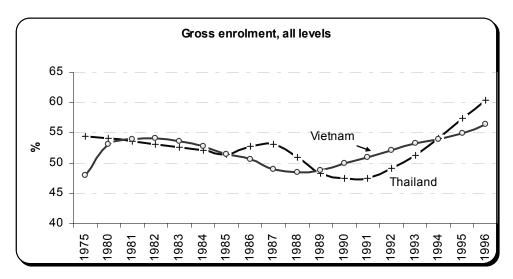
Figure 14: Tertiary Level Enrolment (thousand), 1975-2006



Enrolment ratios

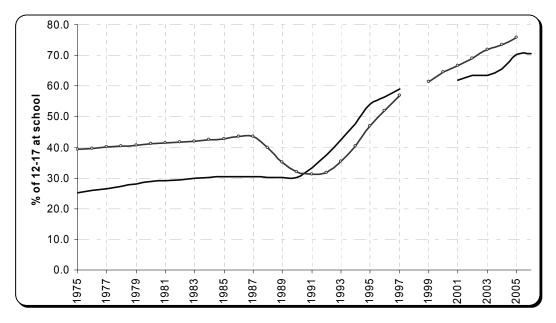
According to the enrolment ratios, statistics shows that at the beginning, in 1975, the enrolment ratio of gross enrolment at all levels in Vietnam is around 10% less than in Thailand but 5 years later Vietnam caught up to the same ratio to Thailand. By average, they are quite similar for both countries.

Figure 15: Gross Enrolment Ratio, All Levels, 1975-2006 (preliminary)



Source: Unesco, http://www.uis.unesco.org/en/stats/statistics/indicators/i_pages/IndGERPriSecTer.asp

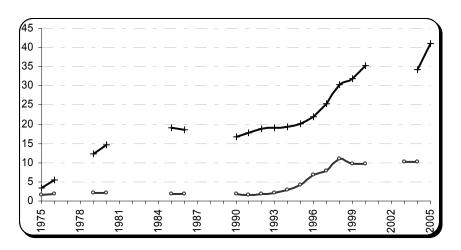
Figure 16: Secondary School Gross Enrolment Ratio, 1975-2006



Source: UNESCO, varied data (incomplete and not homogenised data)

It is quite clear that at the beginning, in 1975, the gross enrolment ratio of secondary school in Vietnam is higher than in Thailand until the beginning of the nineties that Thailand has more enrolment ratio than of Vietnam. However from the beginning of the 21st century Vietnam has greater enrolment ratio than of Thailand.





Source: World Bank, World Bank Indicators of Development.

Survival rates (indicators of efficiency): survival rate at grade 5, 7,9,12 (best fit to be chosen depending on education system); survival rates 1st year of secondary vs. last year of primary, first year of upper secondary vs. last year of lower secondary. Survival rates in vocational education, higher education vs. secondary general or vocational education.

Vocational and technical education: Labour capacity preparation

Vocational and Technical Education (VTE) are roughly organised on the same basis in Thailand and Vietnam. However, the curricula and training of students are quite different. The number of students in different fields is also contrasted in both countries. Vietnam produces more and higher level technicians and Thailand could get some useful teachings from the comparison with Vietnam.

Like most countries in the world, Thailand and Vietnam have developed VET starting at the level of upper secondary education, or *Matayom 4* in Thailand. In modern education systems, it is widely agreed that at the age of 15 or 16, some children should be oriented towards technical education to learn a craft, generally manual work. In effect, general knowledge acquired in nine years of schooling is considered as sufficient to learn a manual job and to be trained even with sophisticated machines, to become qualified workers. Many crafts in construction, in industry, and even in commerce and services do not require a high level of knowledge in fundamental disciplines. A machine operator in food industry does not need to be an expert in aliments biochemistry, nor needs a vendor to be aware of the theory of financial markets.

In all education systems, there are children who show fewer capacities in fundamental and abstract disciplines, and are more suitable for more practical knowledge. Some even stop schools after nine years of education and prefer to work with their family or elsewhere. Thus, it is necessary that the system of education offers vocational education in different areas to teach the basis of their craft to future manual workers.

These manual workers trained in vocational schools usually have a low level in fundamental disciplines, but can excel in their craft. Very often, they were not good enough in

fundamental disciplines to continue in the general stream. So vocational schools fulfil a need for these children to be taught in manual work, and need for the economy to have low skilled manual workers.

Besides, modern economies do need more and more technicians. Technicians are not craft or manual workers as it has just described. There are persons that need to master a technical process, which can be a set of complex operations. They have to monitor these operations and need to have good theoretical knowledge in their specialty. In food processing for instance, a technician in charge of freezing operations must know about the chemical mutations in the freezing process, or a technician operation medical equipment (for blood conservation for instance) must have serious knowledge in some fields of medicine. In the modern world, there is a growing need of technicians having not only a good knowledge in technologies but also, because it is necessary for the latter, a good background. And according to the competitions among international test "Academic Olympic", Vietnamese secondary school students have been performed much better than to those of Thai students since the seventies.

For the specialized training at a higher level or university level in Thailand, after completing secondary school, students can be oriented in technical education. Higher level technicians are trained in Rajamangala Institutes of Technology (now universities), with many other private and public institutions and universities offering technical education, under the Ministry of Education. In Vietnam, there are technical secondary school education offered in Ministry of Education and Training(MOET), technical universities and colleges which are under specialized ministries, such as Ministry of Labor, Invalids and Social Affairs (MOLISA), General Department of Vocational Training (GDVT), and etc. In both countries, there also are some high tech institutes or colleges within universities, although in limited numbers.

Roughly, the organization of the education systems and of VET within the system is comparable from on country to the other. But the environment and the path (or curricula) of students are very different in the two countries.

In Vietnam, vocational schools train low skilled workers, like workers in construction, in textile industries, etc. After three years, they are able to work in industries. Out of 100

children who complete lower secondary or *Matayom 3* level, 41 drop school afterwards, 54 continue in general stream, and only 5 go to vocational education. Part of those who drop school also follow short vocational training out of the official education system.

Higher technical education is not related to vocational schools. Those who enter in technical colleges or universities come from general education and have passed the end of secondary national test. About 40% of those who passed the general secondary test choose to go in higher technical education and 60% in universities. So students in technical fields or in general fields have the same background. In the technical stream, they receive short but intensive training (2 years) and can work as technicians afterward. They also can continue two more years to get a higher degree and, under certain conditions, they can join university programmes up to a degree of engineer or another academic degree.

In Thailand, the system works differently. After *Matayom 3*, about 30% of students choose to enrol in vocational education. Out of 100 children who complete lower secondary or M3 level, 37 drop school afterwards, 38 continue in general stream, and 25 go to vocational education. Most of them will then continue in technical colleges, while not many students who come from the general stream will choose to go in technical colleges (they often are those who failed at entrance exams for university). So technical colleges are roughly the continuation of vocational schools. The students of Rajamangala University of Technology are mainly former students of vocational education. They are not well prepared to receive high technological teaching because they are weak in fundamental disciplines and lack theoretical knowledge. Moreover, since Rajamangala University of Technology are becoming universities, many of those students expect to get a bachelor or even a master degree, although they did not receive sufficient knowledge in many disciplines since *Matayom 3*.

The Thai vocational and technical stream is organised as if higher technical education was merely the continuation of manual work education received in vocational school. It is true that there are teachings of maths, physics or Thai in vocational schools, but the level is weak and students show not much interest for these disciplines, where they were already weak before *Matayom 3*.

In those conditions, we cannot expect to train correctly technicians required by high tech industries. Some technical colleges do exist in universities, and King Mongkut University of Technology prepare high level technicians. But these institutions are exceptions and, in any case, do not train enough technicians to respond the country's needs.

Conclusion: Quality of education and training

In Vietnam, there are exams at the end of each level (but the end of primary exam is to be abolished). Moreover, students who do not meet the requirements to get to the next level have to repeat. Vietnamese students (and parents) are familiar with this end of year pressure and competition, and they largely accept it. Although bribes can ease passage from one level to the other, the system remains selective. However, rising costs of education, including in primary level, have introduced a new kind of selection based on wealth. Moreover, as in Thailand, a private sector has developed in education and offers services to those who fail in the public sectors and are ready to pay for more education.

Selection is important to get to higher education in Vietnam. This is a way to keep higher education at a correct level with scarce resources (Vietnam cannot afford to have has many people as Thailand in higher education). Although many complain about the poor level of students, there is no devaluation of diploma as in Thailand. Students are conscious to belong to an elite. Up to recently, more than 95% of graduates worked in the public sector. In Vietnam, public university is mainly the fabric of civil servants (this was also the case of Thailand up to the 1990s).

In both countries, employers complain about inadequate or poor training of technicians and skilled workers. Interviews of entrepreneurs show that there are a lot of complaints about the quality or/and the behaviour of the workforce. Non adequate training, difficulty to find good technicians (in Thailand) or managers (in Vietnam), lack of flexibility in Vietnam (workers are reluctant to work extra time), high mobility in Thailand...; complaints are not the same but one can be heard in both countries: technical training is not adapted to the needs of companies.

In service training is not developed (high mobility of workers in Thailand refrain employers to invest in training). Except in some big firms that have their own training centre and scheme for workers (Japanese firms for instance), in-service training is not developed in Thailand as well as in Vietnam. It is limited to the knowledge of rules and regulations of the company, security standards and if applicable, to ISO specifications. Very few firms offer career plans to their employees. The main explanation is that firms fear that trained employees will leave to competitors, and that is not worth investing in training. This situation explains why many industries continue to favour labour intensive organisation of production, with simple tasks to be performed by the workers.

In both countries, VTE education suffers similar deficiencies. Equipment and machinery of VTE institutions obsolete, teaching methods and fields not updated. In addition, students in technical fields barely have the opportunity to learn with up-to-date equipment. Most technical colleges cannot afford to buy this kind of equipment, and the only solution is to have agreements with firms (a few cases). At vocational level and especially in small rural vocational schools, this problem is very acute.

Both countries now invest in high tech training. A response to this situation in the two countries has been to set up some high tech colleges or institutions, with good equipment, in cooperation with industry (Thai Science Park for instance). Students are selected after evaluation and are offered high quality training. In addition, firms take in charge tuition fees partially or totally.

These experiences remain isolated and insufficient to fill the need of high technicians. There is also a risk that these technicians who are trained for very specific technologies will not be adapted to new technologies in ten years, unless continuous training is set up.

The environment is quite different in Vietnam and in Thailand for this kind of experience. Vietnam has a long tradition of high tech teaching at university, and does not have to change the system (selection of students and teachers, curricula) but only the content. Through international cooperation, universities and faculties of technology have sought to upgrade and update their teachings. For Thailand, this is a new experience and the process of selection is not yet clear (exception to that is the King Mongkut University of Technology and a few colleges in universities).

References

- Barnett, Kate & Spoehr, John (2008). Complex not simple: The vocational education and training pathway from welfare to work. A National Vocational Education and Training Research and Training Program Report. Australian Government.
- Consultative Group Meeting for Vietnam (2000). Vietnam 2010: Entering the 21st

Century. Partnerships for Development. Vietnam Development Report 2001. Giang Hai (2007) "Minority students fight for an education" Viet Nam News(04-10-2007). Henaff, Nolwen (2007). Skills for productivity, employment growth and development: The case of Vietnam. IRD Draft version September 2007.

- Hong Thuy(2008) "Migrant workers need help" Vietnam News (04-03-2008)
- IIE Vietnam(2004). Higher Education in Vietnam update May 2004. Institute of International Education. Vietnam.(Unpublished document).
- ILO (2003). Learning and training for work in the knowledge society. Report IV(1) International labour Conference 91st Session 2003.

(2005). Recommendation concerning Human Resource Development: Education, Training and Lifelong Learning. Recommendation195. Geneva: ILO. http://www.ilo.org/public/english/employment/skills/hrdr/rec/r index.htm

Jones, Karl (2007). "Vietnam's WTO hopes and dreams" Asia Times online http://www.atimes.com/atimes/Southeast_Asia/IA12Ae03.html download 25th December, Kristy "The Higher Education System in Vietnam" http://www.wes.org/ ewenr/00may/feature.htm.

Long S Le. (2008). "Labor vs market in Vietnam" ASIA Times Online. http://:www.atimes. com/atimes/Southeast_Asia/JD05Ae02.html

Mitchell, Carrie L.(2005). "Beyond barriers: examining root causes behind commonly cited Cleaner Production barriers in Vietnam" **Journal of Cleaner Production 14.**

Minh Huong (2007). "Lack of training hurts growth: Official" Viet Nam News (27-07-2007).

- Nguyen Tien Dat (2008.) **The development of education and training system in Vietnam and current system.** A paper presented at the Faculty of Education, Chiang Mai University on 27-28 February.
- Nguyen Thien Nhan (2007). "Too many graduates ill-equipped, warns minister" Viet Nam News (17-09-2007).
- Nong Duc Manh (2007) "Education must put people first: Party General Secretary" **Viet Nam News** (08-09-2007).
- Phuong L. Nguyen (2006). "Effects of social class and school conditions on educational enrollment and achievement of boys and girls in rural Viet Nam" International Journal of Educational Research 45.

Tangchuang, Phasina and Others (2008). Labour capacity preparation: Comparative

analysis of Thai and Vietnam 1980-2025. Final report to Thai Research Fund. Townsend, Robert M.(2007). Financial Systems in Developing Economies: Growth,

Inequality and Policy Evaluation in Thailand. University of Chicago.

UNESCO(nd.) **Quality of Education: Concept, scope and measures**. www.unesco.org.vn UNEVOC(2006). **Participation in formal technical and vocational education and**

training programmes worldwide : An initial statistical study. www.unevoc. unesco. org/publications/

- Vietnam Development Report 2001 Vietnam 2010: Entering the 21st Century OVERVIEW. Vietnam Development Report 2001. Consultative Group Meeting for Vietnam
- Vietnam Development Report 2007 (2006). **Aiming High.** Joint Donor Report to the Vietnam Consultative Group Meeting Ha Noi December 14-15.
- Vietnam Economic Studies (2000). Executive Report on Strategies in Vietnam. www.icongroupedition.com.
- Vietnam Education and Training Directory(2004). 3rd Edition, MOET, International Co-operation Department, Hanoi : Education Publishing House.
- World Bank, ADB and UNDP (2000). Vietnam 2010: Entering the 21st Century Pillars of Development. Vietnam Development Report 2001. Consultative Group Meeting for Vietnam, December 14-15.

World Bank (2006a). Vietnam Country Gender Assessment. December.

(2006b). Overview of the Capital Markets in Vietnam and Directions for Development. Finance and Private Sector Development Department, May 2006. Xavier, Oudin (1993). "Education and Career Patterns among Small Scale Entrepreneurs in Thailand" in Amara Pongsapitch, et al. (Editors) Entrepreneurship and Socio-economic Transformation in Thailand and Southeast Asia. Proceedings of the Seminar of Bangkok, February at Chulalongkorn University.