

## **Education Reform and Sustainable Development in Vietnam: A Preliminary Analysis\***

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### **Abstract**

Although education has been recognized as the top priority in national policy by the Vietnamese Government, there seems to be a lack of tangible achievements in education since 1993. More specifically, it appears that education development in Vietnam has not kept pace with economic development, which has taken place since the introduction of *Doi Moi* in 1986. In general, education is a complex issue and education reform is accordingly difficult, and many of the major problems in education are direct or indirect consequences of the lack of resources available to education. However, the numerous problems in education and training in Vietnam have become pressing, and Vietnam needs to urgently implement a number of practical reform measures in order to promote sustainable development.

This paper aims to serve a three-fold purpose. First, it considers the role of education in the process of accumulating human capital, which is now seen by economists as the primary engine of long-term economic growth. Secondly, it presents an overview of education in Vietnam, including a short discussion on its problems and shortcomings. Thirdly, it proposes some strategies for education and human resource development for the next ten years in Vietnam. These proposals should be viewed as an integral component of any long-term strategies for sustainable development in Vietnam.

**Key words:** Education; Education Reform; Sustainable Development, Vietnam

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## 1. INTRODUCTION

Following a full-scale war ending in 1975, Vietnam's economic performance had been seriously hampered by the failure of its foreign policy and command economic management, the collapse of the former Soviet Union, and the US-led trade and investment embargoes. The *Doi Moi* policy officially launched in 1986 has brought many remarkable economic achievements for Vietnam, especially in the area of macroeconomic stabilization. During the decade 1986–95, Vietnam's real GDP grew, on average, 6.4 per cent per annum. This growth rate was highest among the 40 poorest countries listed in the *World Development Report 1996* (see World Bank 1996: 172 & 188).<sup>1</sup> Thanks to this rapid economic growth, income poverty in Vietnam dropped from 75 per cent to 40 per cent during the same period (see United Nations Development Programme (UNDP) 1997: 38).

Soon after the Asian financial crisis in 1996, the Vietnamese economy began to face multiple hurdles, especially the sharp decline in foreign direct investment (FDI) and the poor performance of the state and the banking sectors. After a decade of speedy growth, Vietnam slowed down considerably in 1998 and 1999 when GDP growth rates dropped to 5.8 per cent and 4.8 per cent respectively (see Asian Development Bank (ADB) 2003). It seems tempting to blame Vietnam's economic problems on the Asian financial crisis. Certainly, the crisis faced by Vietnam's top foreign investors had adversely affected Vietnam. Yet, there were warning signs of economic slowdown well before the onslaught of the Asian crisis. A good indicator is the level of FDI to Vietnam, which had begun to decline before 1997. In the last few years, Vietnam's growth rate has recovered somewhat (6.8 per cent in 2000, 6.9 per cent in 2001 and 7 per cent in 2002, see ADB 2003). This is primarily due to an expansionary aggregate demand policy and more favourable external factors, including in particular a worldwide increase in the price of crude oil and the Bilateral Trade Agreement between the US and Vietnam.

Early in 2001 Vietnam's National Assembly adopted an average target of 7–7.5 per cent GDP growth rate per annum for the next ten years. This target, set by the Ministry of Planning and Investment, aims at doubling Vietnam's real GDP by the end of the first decade of the 21st century. Vietnam's current population growth rate is 1.4 per cent per annum and decreasing very slowly (see ADB 2003). After allowing for population growth, the government target, if achieved, will increase Vietnam's GDP per capita by about 74 per cent after ten years. Since Vietnam's costs of living will rise as the economy becomes increasingly open to international trade, its accumulated growth in PPP GDP per capita will be even less than 74 per cent over the same period. This means Vietnam's currently low ranking in terms of PPP GDP per capita (160 out of 206 countries in 1999, see World Bank 2000/01: 275), will only improve mildly if the growth target is reached.

But even this modest target is by no means assured in view of Vietnam's recent performance. This seems consistent with the experience of China, which started the reform process about a decade ahead of Vietnam. Not surprisingly, there has been a consensus among economic

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<sup>1</sup> Poverty here is defined in terms of purchasing power parity (PPP) GDP per capita, i.e. GDP per capita adjusted for price differences between countries.

observers and experts that Vietnam urgently needs a new wave of further reforms to attain this 10-year planning target.<sup>2</sup>

Most of the discussion on further reforms, sponsored by influential international organizations (such as the World Bank, International Monetary Fund (IMF) and ADB) and foreign investors, centres around privatization (called equitization in Vietnam), the growth of the vibrant private sector and the level playing field between state-owned and private enterprises. Other often-mentioned issues are banking and administration reforms. These proposed reforms are basically aimed at encouraging a steady flow of foreign direct investment (FDI) into Vietnam. Given the important role played by FDI in raising the capital/labour ratio and thus labour productivity in Vietnam, the above discussion is perfectly sensible.

At the same time, there seems to be much less publicity and discussion on education and human capital development in Vietnam. This is partly because foreign investors have much less interest in promoting Vietnam's human resource development. A quick examination will reveal that, for a variety of reasons, Vietnam's human resource development has not generally been able to match its economic development since the launch of *Doi Moi*. In fact, there have been no remarkable achievements in education in Vietnam since 1993<sup>3</sup> despite the Government's official recognition and regular insistence of education as the top national policy.<sup>4</sup>

The relative lack of international attention on and real achievements in Vietnam's human resource development is rather unfortunate. This is because the economic race between Vietnam and its neighbouring countries is a long-term issue.<sup>5</sup> It is well known that long-term growth in output requires a balanced growth in both physical and human capital. Further, based on the experience of China (see World Bank 1996: 173), the economic growth of Vietnam in the next decade would be lower than it was in the last decade, unless there were substantial changes in its economic policy or external environment.

This above discussion suggests that, in addition to *Doi Moi* Mark II, Vietnam needs to design and implement a well-planned long-term strategy for human resource development. Low-income nations tend to be forced to carry out economic policies with short-term and tangible benefits, and are thus condemned to the 'vicious circle'.<sup>6</sup> To catch up with neighbouring countries within the shortest possible period of time, the Vietnamese Government should forgo short-term benefits and develop a solid foundation for long-term economic development. With

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<sup>2</sup> One of the most outspoken domestic proponents of further reform was the well-known, now deceased, economist, Dr Nguyen Xuan Oanh. In an interview granted to Reuters in April 1999, he explicitly spelt out the need for *Doi Moi* Mark II.

<sup>3</sup> In 1993, public expenditure as a percentage of GDP in Vietnam rose very significantly.

<sup>4</sup> Article 35 of Vietnam's current Constitution (issued in 1992) stipulates that education is the first priority of the national policy.

<sup>5</sup> For example, based on the PPP GDP per capita, to catch up with the living standards of the Philippines and Indonesia, the annual GDP growth of Vietnam should be 3.5 percentage point higher than that of the Philippines for the next 20 years, and 3 percentage point higher than that of Indonesia for the next 40 years (for more details, see Tran Nam 1999: 242).

<sup>6</sup> By vicious circle we mean that poor countries are forced to implement short-sighted policies which in turn will keep them poor.

such a foundation, the GDP may grow more slowly in the early stage, but would then accelerate in the longer term.

Sustainable economic development in a low-income country in transition like Vietnam is a multifaceted and complicated issue. This paper focuses on the relationship between education, human capital and sustainable economic development. It aims to serve a three-fold purpose. First, it analyzes theoretically the role of education in the process of human capital accumulation, as a strategy for sustainable development. Secondly, it reviews the performance of and problems faced by the education sector in Vietnam. Thirdly and finally, it proposes some general as well as specific measures for reforming education in Vietnam. The paper will be confined mainly, though not exclusively, to education at secondary and tertiary levels. The ideas presented in the paper reflect the author's experience as an educator at a number of universities in New Zealand, Australia, Japan and the United States, as well as arguments based on neoclassical economic theory.

The remainder of this paper is organized as follows. Section 2 considers the meanings of sustainable development and the role of education in this process. This discussion highlights the many benefits of education and distinguishes between knowledge and human capital. Section 3 reviews the performance and problems of education in Vietnam. Section 4 proposes a number of reform measures for education and human resource development in Vietnam. The concluding section summarizes the main findings of the paper.

## **2. EDUCATION, HUMAN RESOURCES AND SUSTAINABLE DEVELOPMENT**

### **2.1 Sustainable Development**

Before proceeding to study education and economic development in Vietnam, it may be worthwhile to touch briefly on the subject of sustainable development, a term which appears in the titles of both the Conference and this paper. Like globalization and information technology revolution, sustainable development has been one of the vogue terms in the last 15 years. However, this term has come to mean different things to different people, depending on the situation and context of usage. Within the discipline of economics alone, for example, Pezzey (1989) found 61 alternative definitions of sustainable development, although many of which are highly similar. A widely quoted definition of sustainable economic development, offered by the World Commission on Environment and Development (1987: 43), is as follows:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The Organisation for Economic Cooperation and Development (OECD, 2003) paraphrases the above definition using economic terminology as follows:

Sustainable development is a development path along which the maximisation of human well-being for today's generations does not lead to declines in future well-being.

Although these definitions are equally vague, we can deduce a few key characteristics of sustainable developments as follows:

- This is a human-centric point of view.
- These definitions apply the Rawls' theory of social justice to the intergenerational distribution of wealth and income.
- Sustainable development can be viewed as an overriding constraint in the economic optimization problem.
- An implication of the above definitions is that the present generation can exploit natural resources for current output and compensate future generations with physical capital.

More broadly speaking, one can think of at least three interrelated aspects of sustainable development. The first aspect of sustainability relates to the inter-temporal evolution of the natural environment, both as the resource provider and life sustainer, resulting from human economic activities. In this sense, development is said to be sustainable if the value of the natural environment does not decline over time. This aspect, consistent with the above definitions, is primarily concerned with the role of the natural environment in the process of distributing wealth and income between generations.

The second aspect of sustainable development relates to social structure and organization. From this perspective, development is said to be sustainable if the society remains reasonably stable and harmonious over time. A necessary (but may not be sufficient) condition of this kind of sustainable development is that the distribution of wealth and income at any point in time is equitable.<sup>7</sup> An indefinitely widening gap between the rich and the poor may not be sustainable in the long term. In this context, sociologists and economists alike have shown that a society reaches its most dangerous situation is when the Gini index of income distribution<sup>8</sup> is 0.5, i.e. members of the society are divided between 50 per cent haves and 50 per cent have-nots (see, for example, Podder 1996). Unlike the previous aspect of sustainable development, this emphasizes on the equality (or lack of) in the distribution of income within each generation.

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<sup>7</sup> Equity or fairness or social justice is a extremely difficult concept to define and measure. Basically there are two extreme approaches to equity: one based on needs only (i.e. everybody has roughly the same needs and therefore should have access to the same amount of economic resources) and one based on capacity only (i.e. everybody should receive an income which is proportional to his/her contributions to the production process). Most people interpret equity as somewhere between these two extremes.

<sup>8</sup> The Gini index is a summary measure of the overall inequality of any cross section distribution of income. Its value ranges from 0 (absolute equality) to 1 (absolute inequality).

The third aspect of sustainable development is the persistent growth in human material welfare. In this sense, development is sustainable if people can continue to enjoy a higher and higher standard of living, usually measured in terms of leisure as well as quantity and quality of goods and services consumed.<sup>9</sup> This paper is primarily concerned with this aspect of sustainable development although there are inevitably some interactions between the various aspects of sustainability. Sometimes the interaction can be positive, e.g. other things being equal, a more equitable society may generate more GDP growth than a less equitable one. Sometimes the interaction can be negative, e.g. sustained increase in consumption tends to contradict sustainability in the natural environmental sense.

## 2.2 Education and Sustainable Development

What is the role of education in a modern society? Education is an old and vast subject. It can be approached, discussed and analyzed from many different perspectives. It is clearly impossible to consider all relevant aspects of education in a single paper, or even in a book. However, within the framework of this paper, it is useful to consider two polar points of view: the purist “education for the sake of education” (gia’o du.c vi. gia’o du.c) viewpoint and the materialist “education for the sake of human material welfare” standpoint (gia’o du.c vi. nha^ñ sinh). Roughly speaking, under the purist approach, educational attainment, with all of its intrinsic, aesthetic and intellectual values, is an end in itself. Under the materialist approach, educational attainment is not an end in itself, but merely a means to accumulate human capital, an essential factor of production.

A good example of the purist approach is the UNDP’s use of the Human Development Index (HDI) to measure and compare the well-being of countries around the world. The HDI is based on life expectancy, knowledge (literacy rate in conjunction with primary, secondary and tertiary enrolment rates) and PPP GDP per capita. I do not dispute the relevance of education as an end in itself but, as an economist, I am primarily concerned with human material well-being. Furthermore, given Vietnam’s current stage of development, my focus will necessarily have to be on education as a tool in serving an economy to generate sustainable growth in aggregate output. Needless to say, a midway approach would be both more balanced and most desirable.

It is now acknowledged that, while the economy may fluctuate in the short run, its economic long-term growth potential depend ultimately on how it utilizes its four factors of production: human, physical, natural and social capital. Since this paper focuses on education and human resources, it would be sufficient to briefly describe the other factors of production. The accumulation of physical capital for economic growth was highlighted in the Solow-Swan model (see Solow 1965 and Swan 1965). Although Hotelling (1931) completed the theory of a mining firm about 70 years ago, economic

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<sup>9</sup> It is well known in the macroeconomic literature that popular measures such as real GDP per capita is not always a good indicator of well-being. Nevertheless, real GDP per capita in PPP\$ has continued to be used as one of the most important summary measures of human welfare across nations.

theorists only began constructing general equilibrium models to accommodate resource exhaustibility in the 1970s.

Social capital, alternatively called social capabilities, is a more elusive concept, which does not render itself easily to formal analysis. It includes such factors as openness and competitiveness of the economy, institutional arrangements, secure property rights, honesty, trust and interpersonal networks. In short, social capital represents a set of any intangible things that reduce transaction costs and, thus, help markets operate more smoothly. The role of social capital as an input in the production process has been considered mainly by development economists in connection with developing or transition economies (see, for example, Hasson and Henrekson 1994).

More recently, many economists have increasingly turned to endogenous growth models, based on the work by Uzawa (1965), Lucas (1988) and Romer (1990). These models explain the accumulation of human capital and emphasize knowledge as an engine of economic growth. Therefore, nowadays, we start to hear such new terminologies as knowledge-intensive industries in addition to more established terms such as labour- or capital-intensive industries. The relationship between education, knowledge and human capital will be further discussed in the next sub-section.

Human capital can be accumulated through three major ways: education, training and working experience. This paper concentrates on the relationship between education, training and human capital. From an economic perspective, education today is a preparation for labour tomorrow. Therefore, all spending on education is not consumption, and instead should be treated as investment in human resource, similar to investment in physical or natural capital. At this stage, it is worthwhile to stress that investment in macroeconomics confines itself to the accumulation of physical capital. Only expenditure on durable goods in education (e.g. school building and computers) is treated as investment. Most of other education expenditures (e.g. teacher salaries, textbooks, school materials, etc) are all treated as final consumption expenditure in the national accounting system. This can obscure the future production potential of a country a little. To determine the output potential of a country, we should look at not only the increase in physical capital, but also in education expenditures (as a percentage of GDP).

### **2.3 The Benefits of Education**

It is important to recognize from the outset that education promotes sustainable growth in all different ways. We have so far concentrated on education as a means to accumulate human capital, which in turn fosters sustained increase in aggregate output. This is the efficiency benefit of education. But education is also capable of promoting sustainable development in the equity and environmental sense. Thus, it is now time to consider the benefits of education more comprehensively.

The benefits of investment in education are both internal and external. Thanks to education, an individual can enjoy higher labour productivity when working in the future. In a market economy, such an increase in labour productivity can be estimated

by the differences in income of workers who are of the same age group but possess different levels of education attainment. In principle, based on the internal costs and benefits to the individuals, we can estimate the internal rate of returns on education.

In addition to the internal benefits, which are captured by individual students, education also brings many external benefits to the society as the whole. These benefits are multifaceted, including economic, cultural and political aspects. Typical examples include:

- Educated workers use physical capital better than less educated workers, and are more likely to be capable of improving the technology and devising new and more efficient forms of production.
- Educated workers tend to increase the average productivity of their coworkers.
- Public education is an effective way of reducing income disparities, and thus contributes to economic development in the long run.<sup>10</sup>
- Part of the incremental income for the highly educated workers will become tax revenue for the government and will benefit all citizens.
- Education improves the quality of life.
- Education helps people to better understand their roles in the process of economic development (including the environment), and help them to participate more effectively in social and political debates.

Moreover, education, especially at the university level, is usually associated with research, discovery and invention, which are increasingly considered by economists as the main engine of output growth, especially in developed countries. Research findings can be regarded as investment in aggregate knowledge. Research at universities in advanced countries often result in new products, production or organizational methods. These improvements increase social welfare and accelerate economic growth. In developing or transition countries, high education institutions also serve as a forum for constructive debates on pluralistic changes and development.

Put simply, the human capital of a country is an increasing function in its labour force (the number of working people) and its aggregate knowledge. However, we have to distinguish between human capital and knowledge. Human capital is short-lived (which disappears when workers retire or die), rival between different uses (one worker cannot do many different jobs at the same time) and costly (people only work if they are paid). On the other hand, knowledge today is almost immortal, non-rival in production and almost costless to be employed.

## 2.4 The Case of Vietnam

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<sup>10</sup> According to the argument of economists like Simon Kuznets (Nobel Prize Laureate in economics in 1971) and Nicholas Kaldor, the widening gap in profit and wealth distribution is inevitable in the early stage of economic development. However, based on more recent and better data, Dieninger and Squire (1997) show that (i) economic growth does not necessarily cause income inequality to increase, (ii) unequitable distribution of wealth may hamper economic growth and (iii) income redistribution policy is beneficial if does not cause investment to decrease.

There are many reasons why Vietnam needs to focus more on its education and human resource development. First, human capital is the most important source of economic development for Vietnam in the long run. Vietnam is often described as being rich in natural resources. In fact, on the per capita basis, the natural resource of Vietnam is insignificant compared to those of its neighbouring countries like China, Thailand or Malaysia (see Tran Nam 1999: 246–7). Physical capital accumulation is important, but Vietnam (i) cannot afford to continue to rely on foreign capital indefinitely, and (ii) needs a qualified work force to utilize the physical capital and new production technologies in a more efficient way.

Secondly, as mentioned earlier, human resource development through education is not only a means, but an end in itself. In the case of Vietnam, education also helps people better understand such issues as tax obligations, population control and environment protection for sustainable development. Thirdly, for a low-income and labour-abundant country like Vietnam, growing international trade tends to result in the expansion of relatively labour-intensive production techniques or products. To avoid producing these products for too long, Vietnam needs to continue its strong investment in educating the generation that is going to join the labour force. Otherwise, based on the experience of Thailand from mid 1980s to mid 1990s, the individual earnings inequality in Vietnam would worsen.

Fourthly, with more half of the population in the 30 or less age group, it is estimated that over one million new jobs need to be created each year to match the size of Vietnam's rapidly growing workforce. Finally, education and training in Vietnam has become outdated, backward and irrelevant. It seems to produce low quality graduates who do not cope well with a rapidly changing world (this will be further elaborated in this next section). These suggest that Vietnam needs to urgently reform its education program to ensure that people entering the labour market possess the capability and appropriate knowledge and skills to find jobs and perform their job requirements successfully.

However, all of the above do not mean that Vietnam has to devote as much resources as possible to education. According to microeconomic theory, to maximize the social utility function, educational expenditure must be set at a level at which marginal social benefit and marginal social cost of education are equal.<sup>11</sup> However, the marginal social benefit of education is difficult (or even impossible) to quantify accurately for two main reasons:

- while the costs of education are short-term in nature, the benefits of education tend to be long-term and spread over a number of periods; and
- as mentioned earlier, many benefits of education are external to the recipients.

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<sup>11</sup> The social utility function represents the utility of the whole population and depends on the per capita GDP. GDP depends on the quality of labor, and the quality of labor in the present time is determined by the expenditure on education in the past. As a result, education expenditure can be treated as a choice variable for maximizing the social utility function.

Another issue is the allocation of total expenditure on education between the public and private sectors. Though the government can control part of the public spending on education, the remaining is determined by private decisions. Similarly, how to divide the total expenditure of education between primary, secondary and tertiary education? Within the secondary level, how to allocate resources between general and vocational schools? Within the tertiary level, how to allocate resources between arts, social sciences, commerce, science and technology? Though economists can apply the standard cost-benefit analysis to partly answer the above questions, economics alone cannot satisfactorily resolve all of those problems. Therefore, these issues must be solved by multidisciplinary studies, which call for inputs from economists, educators, administrators, planners and the business community.

Before ending this section, it may be useful to reiterate that education is only one dimension of the long-term economic development policy. Based on economic data, education attainment in the developing world has improved steadily; yet economic growth varies considerably among countries within this block. Therefore, while education is necessary, it is in itself not sufficient for strong and sustainable growth. Economists recognize that one of the important factors explaining the differences in growth performance by developing countries is the openness of the economy. It is conceivable that the open-door economic policy helps to transfer technology from more to less developed countries more rapidly. This makes the skills level of the labour force relevant as the absorption and effective application of technologies brought in by foreign trade and investment depend primarily on the domestic supply of skilled workers.

### **3. OVERVIEW OF EDUCATION IN VIETNAM**

#### **3.1 Education System in Vietnam**

From 1954 to 1975, Vietnam suffered from division and warfare. In the North, the education program was part of wider social-political-economic policies, rather than as a means for economic purposes. This policy emphasized on mass education, especially illiteracy eradication campaigns as well as vocational and professional training. Following the Soviet and Eastern Europe models, universities in the North tended to be highly specialized and dispersed, and focused mainly on science and engineering. A significant contribution of education in the North during this period was teacher training colleges. These colleges trained people in villages, especially young women, to become teachers in rural primary schools.

During the same period, education in the South was influenced by the French, and later, the American system. The teaching programs here tended to be academic and paid little regard to vocational and technical training. The secondary school curriculum in the South (known as the Hoang Xuan Han curriculum) closely followed the French model, with all its strengths and weaknesses, until the mid 1960s. From 1965, the

American model of comprehensive secondary education was experimented in a number of Demonstration Schools in the South. In addition to three multidisciplinary public universities, there were also three specialized private universities operated by various religious groups. Following the recommendations for reform by a team of American education and administration specialists, the South Vietnamese Government established a number of community colleges at the provincial level in 1971 and a Polytechnic University in Thu Duc in 1973.

The education system in Vietnam today is similar to that in most Asian countries. Children between the age of 3 to 5 go to kindergarten. Basic education starts at the age of 6, with five years in primary school and four years in lower secondary school. The next level is three years of higher secondary or vocational school. In addition, there are various out-of-school education programs such as literacy campaigns, in-service training and social welfare education activities provided by the government and various unions.

Decree 90/CP dated November 1993 divides the post-secondary education into two levels: college (certificate) and university (bachelor degree). The college program lasts for 2 to 3 years (no more than 4 years), while a bachelor degree lasts for 4 to 6 years. Both programs have two parts: general education and specialized education. Above the bachelor degree, there are master and doctorate degrees. In general, the post secondary education lasts for 2 to 9 years, depending on the subject and degree (see Truong 1996 for more details).

Public education is the responsibility of the Ministry of Education and Training (MoET), except for a number of military and security schools. The central government regulates the post-secondary institutions, local governments regulate secondary schools and districts or village administration regulates primary schools. Financing education is the responsibility of the government at each level. The central government pays for most of teacher salaries and student scholarships. Other expenses, e.g. school construction, are usually funded by the provincial, district or village administration. Though education is by and large operated by the government, private education has started emerging in recent years, especially at the secondary and university levels.

In principle, each village in Vietnam should have at least one primary school, and each district should have one secondary school. Based on official statistics, on 30 September 1996, Vietnam had 8,205 kindergartens, 20,242 primary and lower secondary schools, 1,407 general higher secondary schools, 266 vocational secondary schools and 109 colleges and universities (see General Statistics Office 1996: 258, 260, 273 & 276). Most of the colleges and universities concentrated in five cities: Hanoi, Ho Chi Minh City, Hue, Da Nang and Thai Nguyen. At present, there are five multidisciplinary universities, including Hanoi National University (established in December 1993), Hue University, Thai Nguyen University and Da Nang University (established in April 1994), and Ho Chi Minh City National University (established in January 1995).

### 3.2 Achievements and Trends of Education in Vietnam

As a poor country, Vietnam has recorded many impressive achievements in education. Based on the HDI, all countries around the world are classified into three categories: high human development, middle human development and low human development. Vietnam improved from 122 (out of 174 countries) in 1995 to 109 (out of 173 countries) in 2000 (see UNDP 1998 and 2002). In 2001, Vietnam's HDI ranked 109 among 175 nations (see UNDP 2003: 239), thus belonging to the lower end of the medium human development category. In 2001, Vietnam was among a group of few nations, whose ranking in HDI (109) is higher than the ranking in PPP GDP per capita (130) by at least by 20 points.<sup>12</sup> It is also interesting to note that Vietnam has made a faster improvement in PPP GDP per capita ranking (22 positions, from 152 to 130) than in HDI ranking (16 positions, from 125 to 109) over the 1995-2001 period. This suggests that education and health developments in Vietnam have not kept up with economic development. But this is also in a way expected as education and health can only improve after a sustained period of equitable economic growth.

For basic education, Vietnam has achieved good outcomes for a long time. Thanks to the government policy, the adult illiteracy rate in Vietnam steadily declined from 20 per cent in 1985 to 13.4 per cent in 1990 and 6.3 per cent in 1995 (see UNDP 1990: 128; UNDP 1998). In 2000–01, this rate increased to 7.3 per cent, but still compared favourably to its richer neighbors like Indonesia (12.7 per cent), China (14.2 per cent) and the Philippines (4.9 per cent) (see UNDP 2003: 238–9).

Examining more deeply, however, the education achievements of Vietnam are still not strong. The UNDP data shows that in 1995, the enrolment rate at all levels of Vietnam was 55 per cent, compared to 80 per cent in the Philippines, 62 per cent in Indonesia, 60 per cent in China and 61.6 per cent in the world (see UNDP 1998). The situation improved substantially in 2000–01, in which the combined enrolment rate at all levels of Vietnam was 64 per cent,<sup>13</sup> compared to 80 per cent in the Philippines, 64 per cent in Indonesia, 64 per cent in China and 64 per cent in the world (see UNDP 2003).

The UNDP data seems very difficult to comprehend since, from 1995 to 2000–01, Vietnam's combined enrolment has increased from 55 to 64 per cent, while its adult illiteracy rate has also risen from 6.3 to 7.3 per cent. The only way for the data to be consistent is that enrolment at primary school level has dropped markedly. If this is true, then access to education in Vietnam needs to be re-examined. In any case, Vietnam's achievements at the secondary and higher education remain very low as indicated in Table 1 below.

Table 1: *Education Attainment Rate (%)*

<sup>12</sup> Note that the World Bank's ranking and the UNDP's ranking may not be consistent.

<sup>13</sup> This improvement may be partly due to the enrolments at numerous sub-standard "studying while working" universities (DDa.i ho.c ta.i chu+'c). According to some sources, there are currently more than 300,000 students enrolling in such university programs in Vietnam (see Nguyen, 2002).

Level of education	Groups of nations			
	High growth	Moderate growth	Low growth	Vietnam
Primary	98	91	74	80–85
Secondary	64	46	34	35.2
Post secondary	23.4	14.3	5.7	2–3

Source: Truong (1996: 28).

In addition, the enrolment rate at university level in Vietnam did not increase (remaining at 2 per cent between 1980 and 1993), while this rate increased very fast from 1 per cent to 4 per cent in China (see World Bank 1997: 226).

In the mid 1990s, educators noticed a number of worrying trends (see Truong 1996: 28–9):

- the enrolment rate drops at all levels (this has been reversed recently);
- the gender enrolment disparity at university level is fairly high and has widened in recent years; and
- children of high-income families enjoy some advantages over children of low-income families in secondary and university education (this means that the poor relatively do not benefit from the fruits of *Doi Moi* in education).

### 3.3 Problems and Shortcomings in Education in Vietnam

Problems and shortcomings in education in Vietnam are obvious and have been extensively discussed in a comprehensive report on education and human resources by the MoET, UNDP and UNESCO (see MoET–UNDP–UNESCO 1992). Most of the problems in education are the consequence of the ‘vicious circle’ and resulted partly from the transition experienced by Vietnam. Some of the main problems are briefly described below:

- **Lack of resources for education**

Although the Vietnamese government has tried to increase the budget allocation for education, the public spending on education in Vietnam is only 2 per cent of GDP, while the average for other Asian countries is 3 per cent (see MoET–UNDP–UNESCO 1992: 53). As the per capita GDP of Vietnam remains low, this means that the per capita public expenditure on education in Vietnam is among the lowest in the world.

- **Low efficiency of resource utilization in the education sector**

The internal efficiency of the education sector in Vietnam is low, mainly due to the inappropriate organization and management as well as wastefulness. The dropout rate is fairly high and the completion rate is low.<sup>14</sup>

- **Weakness of, and constraints on, teaching staff**

This problem is common to many countries, including the advanced ones. In the case of Vietnam, this is of the highest concern and most daunting to solve. At the university level, academic staff are both poorly qualified and rapidly aged.

- **Outdated and irrelevant syllabi, textbooks, and teaching and assessment methods**

The subject contents are obsolete, textbooks backward and teaching methods outdated so that graduates do not acquire the necessary skills for a society that changes swiftly in many fundamental ways. As a result, the external efficiency of education in Vietnam is relatively low.<sup>15</sup>

- **Lack of linkage and coordination between education, production and employment**

The linkage between education and research institutions and businesses is almost non-existent or very weak due to the lack of appropriate organizational mechanisms and market institutions.

- **Inappropriate management and organization in universities and research institutes**

Despite a number of reforms (e.g. the establishment of National Universities), the post-secondary education system in general is too fragmented, isolated and inefficient.

Thus, it is not surprising that Vietnamese universities are ranked lowly in the region. According to a recent survey by the *Asiaweek*, Vietnam's National University (the leading university in the country) was ranked 62 among 65 universities in Asia included in the survey. Similarly, a Vietnamese academic assessed that Vietnam's undergraduate degree is equivalent to the first two years at overseas university, and that Vietnam's master degree is only equivalent to a bachelor degree at overseas institutions. According to a research by Maureen Chao of University of Washington at Seattle, most Vietnamese graduates employed in many foreign joint ventures with Vietnam have to be re-trained in both technical and public relations skills.<sup>16</sup>

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<sup>14</sup> According to the World Bank data (see World Bank 1995), the rate of completion at primary schools in Vietnam is about 50 per cent and the dropout rate is more than 40 per cent.

<sup>15</sup> The report by MoET–UNDP–UNESCO, based on the 1989 Census, indicates that the unemployment rate among university, college, and vocational secondary school graduates in Vietnam was 12.2 per cent. The unemployment rate among university graduates in Thailand in 1988 was 6 per cent and Indonesia 12.6 per cent, respectively (see World Bank 1993: 4).

<sup>16</sup> The information in this paragraph is taken from Nguyen (2002).

In addition, Vietnam has recently suffered from a proliferation of both undergraduate and postgraduate programs where teachers are unqualified and teaching or research methods are of poor quality. This has resulted in substandard degrees and graduates. This negative phenomenon in education in Vietnam does not appear to slow down or to be regulated appropriately.

## **4. SOME STRATEGIES FOR EDUCATION AND HUMAN RESOURCE DEVELOPMENT IN VIETNAM**

### **4.1 Education Policy**

Education is a dynamic, not static, investment. Education policy and curriculum should change and adapt to practical needs, especially in the context of a transition economy facing rapid changes as a result of globalization and the information technology revolution. A fixed and unchanged program is a stagnant one, and not appropriate to human training today. Though the primary purpose of education is virtually the same everywhere, the teaching materials and methods should be flexible to be appropriate to the peculiar circumstances and the diverse development needs of different locations.

Recently, Vietnam's National Education Committee was established to examine the most critical issues in education and training. Membership of this Committee should be expanded to include the political leaders, administrators, educators and representatives of business and international organizations, as well as overseas Vietnamese experts. Members of the Committee should undertake overseas tours at least once every two years to observe at first hand education practices and achievements of relevant countries. In addition to its regular meetings, the Committee should report to the National Assembly and the government once every three years to review successes and failures of the recent past, and to recommend direction and specific policies for the coming years.

The success/failure of an education policy or plan must be assessed in terms of clearly specified goals, true outcomes and verifiable statistics. It is important to bear in mind that

- education achievements should be evaluated by the performance of the mass of students, not the elite few. Thus, winning international competitions in mathematics, physics, chemistry, biology and information systems<sup>17</sup> is in itself, while morale boosting, not indicative. If anything, it

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<sup>17</sup> Since 1974, Vietnam has consistently been in the top ten countries in International Mathematical Olympiad Competition, which normally attracts most countries in the world. Vietnam is also regarded as a leading country in international competitions in information systems, biology, chemistry and physics. In an information systems championship competition recently, Vietnam was ranked 15 among about 200 participating countries, 4<sup>th</sup> in Asia and 1<sup>st</sup> within ASEAN (see Nguyen 2002).

shows that Vietnamese students are intellectually capable but the education system of Vietnam has failed them!

- an excessive number of (sub-standard) qualifications is not an indication of a skilled labour force but simply a failure of the education system; and
- true reform of the education system can only begin when lip service, inaccurate and inflated reporting, self congratulations, etc all stop.

## 4.2 Resources for Education

The Vietnamese Government seems to recognize the crucial role of education and has steadily increased public expenditure on education in the national budget in the last decade. However, as a share of GDP, public expenditure on education from 1993 to present does not increase significantly, as illustrated in Table 2 below.

Table 2: *Public Expenditure on Education in Vietnam, 1992–9*

Year	1992	1993	1994	1995	1996	1997	1998	1999
% of total budget	5.8	7.4	8.2	8.5	8.6	10.0	10.3	9.8
% of total recurrent budget	7.7	9.8	11.1	11.1	11.6	14.2	15.1	15.8
% of GDP	1.4	2.1	2.2	2.0	2.1	2.4	2.3	2.1

Source: IMF (1998: 21; 1999: 21).

To increase education expenditure in Vietnam, a many-pronged policy is needed:

- **Increase government expenditure relative to GDP**

This is a big challenge as in recent years tax revenue as the share of GDP has declined (19 per cent in 1992, peaked at 24.7 per cent in 1994, and down to 17.8 per cent in 1999, see General Statistics Office 2000). Unless the Government undertakes bold tax reform (e.g. direct tax base broadening), this policy may not be feasible.

- **Channel more foreign aid to education**

More official development assistance should be allocated to infrastructure development, especially building more schools in low-income regions. The Vietnamese Government seems to have done so. A very recent example is Primary Education for Disadvantaged Children Project, which focuses on disadvantaged students in Vietnam and will operate from 2003 to 2009. The project is supported by a partnership between Vietnam, the governments of Australia, Canada, Norway, the United Kingdom, and the World Bank. The total project cost is estimated at US\$244 million of which the donors provide US\$200 million.

- **Encourage private education**

It is necessary to encourage the private sector (both domestic and foreign) in providing education services. Public schools should be given some autonomy in fund raising. Parents also need to play a more active role in financing schools, especially in buying expensive facilities such as computers, etc. Private overseas study of appropriate courses should be encouraged. However, the government must design and implement appropriate measures to deal with the inequity aspect of private education, which may disadvantage students from a poor background. For example, the government must reserve most scholarships (both domestic and foreign) to truly needy and brilliant students. They government may also consider offering low-interest loans to needy but bright students to further their studies.

There exists a paradox within the education sector in Vietnam. There exists, at the same time, too much control and insufficient regulation on private education, especially private universities and “studying while working” universities. It is time the MoET issues and enforces clear guidelines and regulation regarding education standards for private education institutions. The government must be prepared to close down, despite local protests, sub-standard private schools and universities for the sake of integrity of the education sector.

With regard to private education development, the government should pay attention to the following issues. First, private schools or universities should focus on relevant subjects for a market economy such as English, computer science, accounting, etc and should operate mainly at the tertiary level. In such a situation, public expenditure on education can be allocated to other subjects such as natural and social sciences, and to primary and secondary education. Secondly, the government should regulate private schools (especially at the tertiary level) to avoid the proliferation of low quality degrees. Thirdly, the MoET should design a program offering support to children of poor families so that they are not disadvantaged relative to better-off children who can afford private tuition.

- **Linkage with large companies and foreign non-profit organizations**

These entities may be able to finance specific education plans, for example, improving English or accounting studies at schools.

- **Set up partnerships or sisterhoods with foreign education institutions**

Overseas schools, universities and research institutions are quite willing to establish close relationships with their equivalent counterparts in Vietnam, and are able to assist in providing some support, especially in training. Vietnam's educational institutions should actively seek this kind of assistance, to be coordinated by the MoET.

- **Encourage overseas Vietnamese to assist**

Currently there are about half a million Vietnamese expatriates with undergraduate and postgraduate qualifications. Many of them are willing and able to contribute to Vietnam, especially in the education sector. They can contribute in terms of labour (providing advice for reform, teaching, cooperation in research, support in bringing local students to study abroad, etc) and funding (providing scholarships, building schools and libraries, sending books and research papers, etc). So far very few Vietnamese expatriates have actively contributed to education in Vietnam. It is mainly because of a lack of trust from both sides. The government should devise an appealing policy and specific programs to take advantage of these enormous resources. Thanks to electronic mail, communication and connection are no longer a problem as they were before.

### **4.3 Organization and Management**

In general, the education organization and management, especially at the university level, should change to become more appropriate, efficient and flexible. Public education institutions should have more autonomy, but at the same time become more accountable to the government. With regard to reform, the Vietnamese government should also follow the experience of high-performing economies.

At the secondary level, schools that are located far from large cities should have more autonomy in such areas as fund raising and curriculum. In addition to general policies and guidelines, these schools need flexibility to be adaptive to local development needs. In contrast, in large cities, the organization and management as well as the curriculum for all schools should be uniform. However, there is room for some flexibility in fund raising, depending on the income level of each area.

At the university level, there should be a plan to establish multidisciplinary universities in the remaining large cities by merging the existing specialized universities and institutes under the same organization. As a result, the organizational structure would become simpler and the duplication in administrative and training functions would gradually disappear. These multidisciplinary universities should be able to enjoy the same rights and status as National Universities. Universities need to form an advisory board with representatives of large firms and overseas experts who can advise on the modernization of the curriculum and teaching methods.

In the future, specialized universities/colleges should only be opened in special areas in the rural, mountainous or coastal areas. The curriculum and research plans of these universities should be linked to the local development need. For example, a branch of Da Nang University, specializing in chemistry, can be located near Dung Quat refinery. In this context, it may also be worthwhile to revitalize the model of community universities/colleges pioneered in the South over three decades ago.

### **4.4 Teacher Training**

Training teachers who are capable and highly committed to the profession is a great (if not the greatest) challenge to education in Vietnam now. This problem is also common to many countries around the world, but it is more severe in Vietnam due to the transition of the economy and its low income. Vietnamese people are keen in learning and respect teachers. In the recent past, however, for some economic and social reasons, the teaching profession has been degraded, resulting in both poorer quality and smaller quantity of teaching staff. To reverse this situation, a number of specific and urgent measures are needed, including:

- increase the number of apprentices in the teaching profession;
- increase the value of scholarships for these apprentice teachers;
- within the budget constraint, increase teachers' salaries at all levels;
- develop private education so that teachers can earn extra income from private tuition;
- teachers should be selected, rewarded and promoted based on their qualifications, teaching performance and professional research;
- allocate aid-funded budget to good teachers so that they can go abroad to attend workshops, conferences or training courses (both short- and long-term) in order to improve their technical expertise and organizational and administrative skills;
- at the university level, invite foreign consultants (including overseas Vietnamese) to work on a short-term basis in strategic courses, using donor assistance or individual goodwill. For local teachers, teaching and research work should be combined in order to improve the education effects; and
- the important role and dignity of the teaching profession and teachers in the society should be truly restored (not just lip service).

In Vietnam, there are currently many unemployed educated people, most of whom are graduates from natural and social/human sciences, especially economics, law and foreign language. If the teaching profession is appreciated, these people can undertake some additional pedagogy training to become qualified teachers at the primary or secondary levels. This can easily happen through the credit and double degree learning system at multidisciplinary universities.

#### **4.5 Objectives of Education**

The educational philosophy of Vietnam should be directed to three major aims: liberation, collectivism and pragmatism. The content of the teaching program must be both modern and relevant. More specifically, education must be up to date and relevant to satisfy the changing and increasingly complex needs of the labour market of a growing transition economy within the rapidly integrated world economy. Although the details of the course contents can be revised on a regular basis, a number of basic, unchanging principles can be articulated as follows.

First, students should be taught about the true position of Vietnam in the world. Though we can be proud of the significant past achievements of our ancestors (Ba'ch Vie^t in general and La.c Vie^t in particular) and the intelligence and industriousness of the Vietnamese people, students should know that Vietnam is a poor and backward country (not only compared to Western countries, but also to other nations in Southeast Asia) and has to rely on foreign resources for its development. Only with such knowledge, Vietnamese students would try to learn more to contribute to the future development of the nation. In addition, students should learn to develop an inquiring and critical mind, and ability to debate in a modest, fair-minded and constructive manner. Teachers and adults are not always right, and students and children are not always wrong.

Secondly, students should learn to work within a team environment. Students should be taught, from an early stage, that everyone has to fulfill one's own assigned task in a cooperative manner in order to reach the common goals of the team. It is necessary to emphasize to students that individual excellence alone is not sufficient for development. Thirdly, students should be trained to have practical skills, including in particular public relations and communication skills, through suitable vocational subjects. These subjects should give students opportunities to develop all their aptitude and capability in problem solving, and adaptability to real life, if they are unable to study further. Students should also learn how to think in terms of mass production and long-term business, rather than small-scale production and short-sighted business practices.

#### **4.6 Teaching, Assessment and Research Methods**

Schools should encourage self-learning and studying by deduction, analysis and comprehension rather than learning by memorizing and cramming. At the higher secondary level (grades 10, 11 and 12) and tertiary level, the emphasis should be on problem recognition, formulation and solving skills. To this end, the teaching methods should encourage students to:

- search for necessary materials and make study-aid objects right from a young age;
- learn by questioning, presenting and discussing in order to help students gain confidence and develop independent, critical and democratic thinking;
- work collectively through a common project or off-class activities; and
- develop practical skills in their daily life.

The formal knowledge acquired at schools should also be supplemented by outside study tours of government bodies, private firms and factories.

In terms of assessment, teachers should:

- focus on the content and ideas, rather than the format or style, while grading;

- reduce the regular examinations and increase research papers or common projects;
- give practical research topics that can be applied in the society or business; and
- use more multiple choice exams to encourage students to study comprehensively and with understanding, rather than memorizing or studying selectively.

At the university level, distance education can also be tried in a number of disciplines that do not require much experimentation (e.g. economics, accounting, etc) to encourage enrolment among students outside large cities.

#### **4.7 Subjects**

Feedbacks from large firms are needed in preparing syllabi and textbooks for vocational secondary schools, colleges and universities. Given a rapidly changing world with globalization and the information technology revolution, education in Vietnam should further emphasize the following subjects:

- **Foreign language, especially English**

Though the government has encouraged the study of English, learning English in Vietnam still faces a number of barriers, mainly due to the shortage of good teachers or native English speakers. This problem can be partly overcome by the assistance of non-profit organizations and schools and Vietnamese expatriates (especially overseas-born young people of Vietnamese ancestry) from English-speaking countries. For example, young people of Vietnamese origin from abroad can be encouraged to come and teach English in isolated regions.

Students from secondary levels upward should have the opportunity to write their essays, reports or theses (especially in the field of information technology) and present their results in English. In addition, Vietnamese students should be encouraged to frequently communicate with students from sister institutions abroad through emails or post. In addition, the government should consider providing tax incentives for encouraging foreign companies to sponsor regular essay writing or debating contests in English in different locations. Currently, most of secondary students in Vietnam can study only one foreign language. If possible, a second foreign language, e.g. French or Japanese, should be added for the last 3 grades of the secondary level.

- **Information communication technology (ICT)**

Vietnamese students are gifted in this area, and computer software services would be an important export industry for Vietnam in the future. To this end, Vietnamese students should be familiarized with computers as early as lower secondary schools (it is best at primary schools, but this may not be feasible at this stage). If schools do not have the budget to purchase computers, external funding can be sought from parent

contributions (through cash donation or fund raising activities) and sponsorship from large firms or from the computer industry. In terms of teaching ICT, there needs to be similar assistance like in the case of English.

- **Vocational subjects**

At the secondary level, students should be allowed to select from an optional range of vocational subjects such as agronomy, industrial arts, home economics and business studies. These subjects were tested with positive results in some demonstration schools in the South over three decades ago. Today, due to the budgetary constraints, these subjects can be reintroduced to the secondary education curriculum in a more limited and localized fashion. In rural areas, agronomy should be developed, and in industrial areas, more focus should be on industrial arts.

## **5. CONCLUSION**

Over the last fifteen years, the Vietnamese economy has developed strongly thanks to the open-door policy and the accumulation of factors of production, especially physical and social capital. Although the government has placed education at the top of the national policy, and attempted to reform it, neither clear directions nor significant achievements were made since 1993. In order to meet the average, annual growth target of 7–7.5 per cent in this decade, education may not yet be the key. But looking further into the future, human capital and technological progress will be the most important factors to the Vietnamese economy in the coming decades.

In general, education is a complicated issue and education reform is difficult, since most of the problems in education typically result from the 'resource constraint'. However, problems in education and training have become critical and the Vietnamese Government should immediately implement a number of specific reforms to get out of this 'vicious circle'. Those reforms will need to channel more resources to human capital investment. Investment in physical capital such as roads and equipment can easily increase production in the short run. In contrast, education and investment in the human capital take a longer time to bring about visible benefits. As a result, investment in human capital may slow down the growth of output in the early stage, but it will certainly be a beneficial sacrifice by Vietnam in the long run.

Education reform, like any other reform, requires clear and appropriate policy. In terms of resources, it is necessary to encourage more private-sector contributions, both at home and abroad, especially in courses which are relevant to a market economy, and at the university level. The government should also work closely with the business community, non-profit organizations and Vietnamese expatriates, not only to supplement resources for education, but also to listen to their recommendations about organization, management, curriculum and teaching methods. More specific policies are urgently needed in teacher training, since this is the most difficult problem for education in Vietnam right now.

Educational philosophies and methods of teaching and assessment should be improved to help students develop independent and innovative thinking, problem solving skills, practical skills and teamwork. The subject syllabi should be modernized, adding a few vocational subjects (at the secondary level) and emphasizing subjects such as English and information communication technology. At the post-graduate level, there should be a closer connection between teaching and research, improved organization and management systems and stronger links with businesses.

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