A COMPARATIVE STUDY OF EDUCATION AND DEVELOPMENT IN CAMBODIA AND UGANDA FROM THE END OF THEIR CIVIL WARS TO THE PRESENT

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A COMPARATIVE STUDY OF EDUCATION AND DEVELOPMENT IN CAMBODIA AND UGANDA FROM THEIR CIVIL WARS TO THE PRESENT

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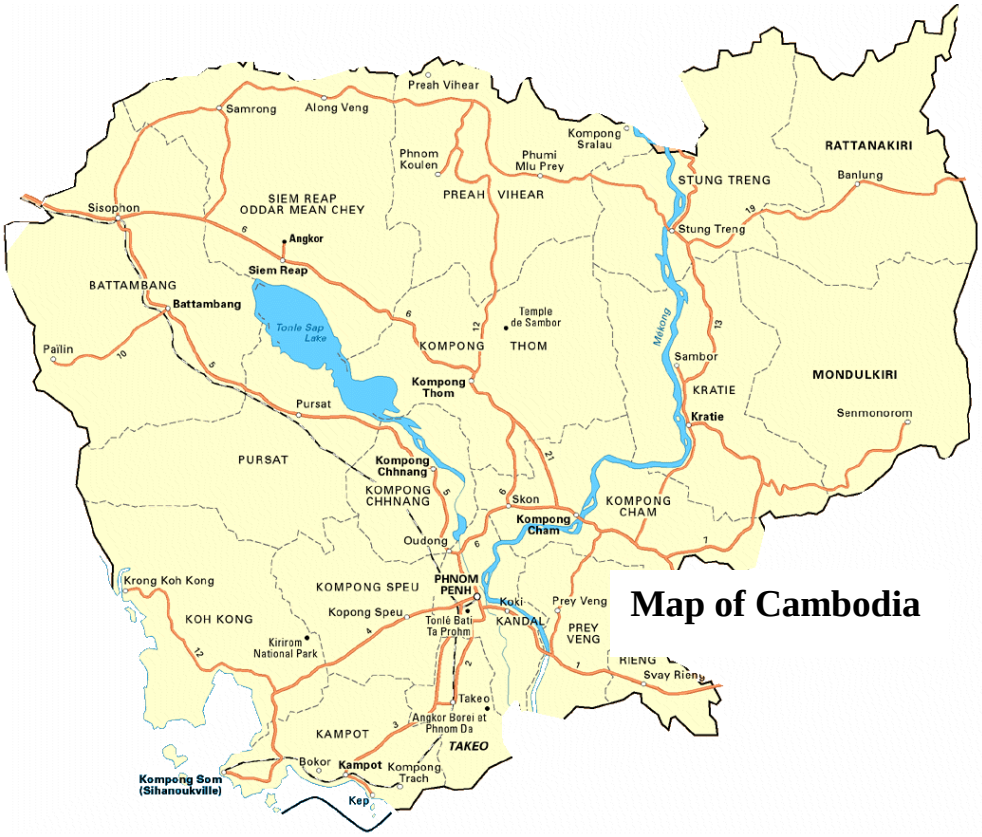
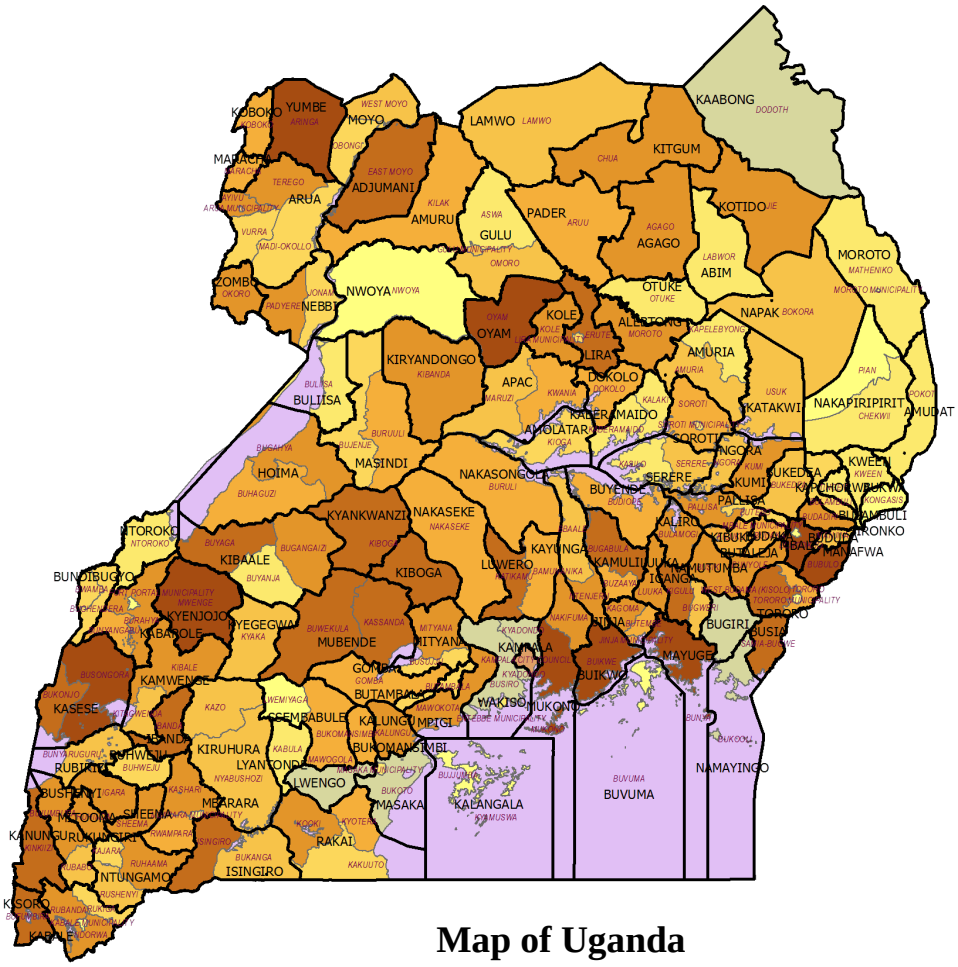
Facts and Figures[1]

	Cambodia	Uganda
Independence	9 November 1953	9 October 1962
Type of government	Constitutional kingdom	Republic
Head of state	Norodom Sihamoni (King: 2004)	Yoweri Museveni (President: 1986)
Prime Minister	Hun Sen (1985)	Apolo Nsibambi (1999)
Total area	181,035 sq km	236,040 sq km
Geography	Coastline	Landlocked
Population (2010)	14,701,717	34,612,250
Population growth rate	1.698 percent	3.576 percent
Life expectancy	62.67 years	53.24 years
GDP per capita (US$ current price)	822	470
Ethnic (% of total population)	Khmer 90, Vietnamese 5, Chinese 1, other 4	Baganda 16.9, Banyakole 9.5, Basoga 8.4, Bakiga 6.9, Iteso 6.4, Langi 6.1, Acholi 4.7, Bagisu 4.6, Lugbara 4.2, Bunyoro 2.7, other 29.6
Religion (% of total population)	Buddhist (official) 96.4, Muslim 2.1, other 1.3, unspecified 0.2	Roman Catholic 41.9, Protestant 42 (Anglican 35.9, Pentecostal 4.6, Seventh Day Adventist 1.5), Muslim 12.1, other 3.1, none 0.9

[1] The World Factbook, Retrieved 9 April 2011, from https://www.cia.gov/library/publications/the-world-factbook/index.html



Map of Cambodia



Map of Uganda

List of abbreviations

ADB	Asian Development Bank
CPP	Cambodian People's Party
CPP	Cambodian People's Party
DFID	UK – Department for International Development
EFA	Education for All
EWP	Education White Paper
FTI	Fast Track Initiative
FUNCIPEC	Front Uni National pour un Cambodge Indépendant, Neutre, Pacifique, et Coopératif
GDP	Gross Domestic Product
GER	Gross Enrollment Rate
HDI	Human Development Index
ICT	Information Computer Technology
JICA	Japan International Cooperation Agency
MoES	Ministry of Education and Sport
MoEYS	Ministry of Education, Youth and Sport
MoLVT	Ministry of Labour and Vocational Training
NER	Net Enrollment Rate
NRM	National Resistance Movement
PAP/BP	Priority Action Programme/Budget Programme
SAP	Structural Adjustment Programme
SAWp	Sector Wide Approach
SEA	Southeast Asia
SSA	Sub-Saharan Africa
TVET	Technical and Vocational Education and Training
UNDP	United Nations Development Program
UPE	Universal Primary Education
USE	Universal Secondary Education
USSR	Union of Soviet Socialist Republic

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CHAPTER I
INTRODUCTION

I.1 Background of the study

Efforts to improve people's living conditions are as old as the history of humankind. However, the systematic study of this effort as an academic discipline called 'development studies' emerged just six decades ago after the end of World War II. Although development involves many aspects — social, political and cultural — economic development is considered the key as it provides resources for promoting other aspects of development. Since the 1950s, countless studies have attempted to investigate the causes of economic development (usually measured in terms of GDP/per capita and poverty) between countries within the same continent as well as between countries across continents in order to detect why, in the long run, some countries can perform better than others. Recently, comparisons between Asia and Africa have become increasingly important both for academicians as well as development practitioners following the growth of dialogue between the South-and-South.[2]

Various disciplines provide a wide range of possible explanations on the underlying causes of economic development, but the most prominent studies have stressed the role of economic institutions (macro-economic stability, a well-defined system of property rights, and openness of the economy) and business-friendly environments, such as right incentives for investors and good governance, as the fundamental causes of differences in economic performance (Benhabib and Spiegel, 1994; López et al., 1998; Easterly, 2001). Although these factors are relevant in economic development, they are not sufficient conditions to ensure a prosperous economy.

Arguably, investment in human capital in terms of education is one of the fundamental factors in economic development. The role of education in economic development is manifested in the successful experience of East and Southeast Asian countries such as Singapore, Taiwan, South Korea, Hong Kong, Malaysia, Indonesia,

[2] UNDP even established a mechanism for policy dialogue and knowledge-sharing amongst developing countries, what it calls the global South. For more details see http://www.ipc-undp.org/.

and Vietnam. Although these countries have different degrees of quality of their economic institutions, business-friendly environments, and good governance, they share a common factor that contributes to their economic development, a strong interest in investment in education (Economist 1991; Morris 1996).

Educational development, however, is a complex issue, especially when it is developed with the ultimate objective of contributing to the overall economic development of a country. It consists of not only multiple sub-sectors (primary, secondary, and higher education), but also equitable access, quality, and orientation of the educational content. Further, different levels of economic development and labour markets need to give different priorities to these sub-sectors and aspects of education.

Experiences from cross-country comparisons reveal that the absence/presence of the appropriate provision of a relevant mix of skilled human resources needed by their labour market and economy is the key to explaining the advancement or stagnation of economic development, not only among East Asian countries, but also in comparison to other parts of the developing world (World Bank, 2008b). Specifically, experiences from cross-country comparison, especially between East Asia and other parts of the developing world, also reveal that at an early stage of development for the investment in education to have a more positive return, basic education, followed by technical and vocational education and training, should be prioritized over higher education. Within higher education, investment in science, engineering, manufacturing, construction, and technology provide the highest rate of economic return compared to the social sciences, business, humanities, and arts. The economics of education analysis reveals that failure to develop appropriate education will lead to the misuse of scarce resources and efforts and failure to fulfill the role of education in the overall economic development process.

This study attempts to analyse as well as compare education and the economic development trajectory of two post-conflict countries, Cambodia and Uganda. Cambodia and Uganda underwent similar historical experiences after the end of colonialism. Between the late 1960s and 1980s, both countries experienced political instability, social upheaval and civil war that significantly affected the efforts to

develop their countries, especially economically. Further, millions of people were lost during this period, especially those with higher education in Cambodia.

Since the end of their respective civil wars, Cambodia and Uganda have depended heavily on foreign assistance to rebuild their devastated countries after more than two decades of civil war and social upheaval. Since then, Cambodia and Uganda have improved in almost every aspect of human development, especially economic growth. Given the two countries' past tragedies, their improvements have received widespread praise from donors as well as their populations. However, despite their rapid rates of economic development, Cambodia and Uganda are still behind many countries as seen clearly in their low GDP (per capita), high poverty rates, and widening inequality (for more details see Chapter VI). This is also reflected in their Human Development Index, which after nearly three decades of peace has remained lower than the average world standard. For instance, the United Nations Development Program (UNDP) classifies Cambodia and Uganda as the 'least developed countries'.

This study is part of a broader comparative research project entitled 'Tracking Development Project'.[3] The Tracking Development Project attempts to explore why Southeast Asia (SEA) and Sub-Saharan Africa (SSA) diverged so dramatically in terms of their economic development over the last 50 years. The project covers four paired countries from these two regions, Malaysia and Kenya, Indonesia and Nigeria, Vietnam and Tanzania, and, finally, Cambodia and Uganda. This adds an additional task for this dissertation: not only analyse why the level of economic performance in Cambodia and Uganda is still low, but also compare why their economic performances and economic development trajectories are different after their respective civil wars.

During the 1990s, Uganda was considered to be on the right path to sustainable economic development, while Cambodia's development was in doubt. In fact, the World Bank characterized Uganda as moving from 'basket case' to 'success story'. This is reflected in terms of economic development where poverty was reduced

[3] More detail about 'Tracking Development Project' can be found at http://www.trackingdevelopment.net/.

substantially and GDP per capita increased steadily in Uganda during the 1990s. Also, its Human Development Index moved from lower to higher than Sub-Saharan Africa's average, while Cambodia remained directionless because of political instability and bad governance. However, at the turn of the millennium, especially since the mid-2000s, the reverse trend was observed. Although Cambodia's economic performance is still below Southeast Asian standards, its economic performance is slightly better than that of Uganda as manifested in higher GDP per capita and lower rates of poverty, especially when it is measured in terms of percentage of population living below US$2 per day (for more detail see Chapter VI). The relative divergence of growth between the two countries is also reflected in their different levels on the 2010 Human Development Index, where Cambodia was ranked 124, higher than Uganda's rank of 143 out of a total of 169 countries.

One wonders what brings about the different performance trajectories in Cambodia and Uganda, and at the same time what hinders their ability to develop economically. Therefore, this dissertation attempts to examine the role of the state in fostering economic development via deliberate provisions for a mixed skilled labour force in Cambodia and Uganda. Such an examination involves two aspects of analysis. The first aspect concerns the relation between education and economic development, and the second aspect addresses the role of the state in educational development. A comparative case study between Cambodia and Uganda is important because it helps to shed light on how the rebuilding of the education system contributes to economic development in post-conflict and aid-dependent countries. The civil wars and social upheaval in both countries not only disrupted educational development, but also destroyed the foundations on which further educational development could be built, especially in the case of Cambodia where formal education was nearly abolished during the Khmer Rouge regime (1975-79).

Concerning the relationship between education and economic development in Cambodia and Uganda, this dissertation's premise is twofold. The first is that the low level of economic development in both countries is due partly to their inappropriate educational development. The second is that their slightly different trajectory of economic development can also partly be explained by their different degrees of

inappropriate educational development, rather than their different degrees of good governance and business-friendly environments, as most prominent economic studies have claimed (Benhabib and Spiegel, 1994; López et al., 1998; Easterly, 2001).

This argument is reflected in the fact that according to good governance indicators, Uganda scores consistently higher in voice and accountability, government effectiveness, regulatory quality, rule of law, and control of corruption, as compared to Cambodia. Only in terms of political stability does Cambodia score slightly better than Uganda, as seen in Table 1.1**.**

Table 1.1 Good governance indicators in Cambodia and Uganda

Governance indicator (percentile rank 0-100)*	Cambodia			Uganda		
	1998	2004	2009	1998	2004	2009
Voice and accountability	21.6	23.1	23.2	33.2	27.9	20.7
Government effectiveness	19.9	15.0	25.7	30.6	34.0	33.8
Regulatory quality	41.5	35.1	39.0	54.6	55.1	46.7
Rule of law	15.7	10.0	16.0	34.3	28.6	40.6
Control of corruption	13.6	15.0	8.6	19.9	27.7	21.4
Political stability	13.5	29.8	25.0	12.5	11.5	15.1

* Higher values indicate better governance ratings.

Source: Retrieved 5 June 2011, from http://info.worldbank.org/governance/wgi/sc_chart.asp

In terms of a business-friendly environment, Uganda also has been ranked consistently higher than Cambodia until recently. For instance, the number of days required to start a business in Cambodia was reduced from 94 in 2003 to 85 in 2010. This is substantially longer than Uganda, which was reduced from 34 to 25 during the same period. Although in Cambodia the percentage of firms engaged in informal payment to public officials[4] declined from 82.4 in 2003 to 61.2 in 2007, this figure is still higher than Uganda that saw informal payments rise from 39.2 in 2003 to 51.7 in

[4] The informal payments to public officials made by firms are expected to 'get things done' with regard to customs, taxes, licenses, regulations, services, etc.

2006. In general, the rank on the Ease of Doing Business Index[5] in Uganda improved from 129 in 2009 to 122 in 2010, while Cambodia increased from 145 to 147 during the same period.[6] Yet, Uganda still has a higher percentage of the population living below US$2 per day and has a lower GDP per capita compared to Cambodia.

Arguably, the slightly divergent level of economic development can be explained by the slight difference in the quality of education and level of educational attainment by students. For instance, the adult literacy rate in Cambodia was 78 percent in 2008, which is slightly higher compared to Uganda, which was only 73 percent in 2010. However, the adult literacy rate in both countries is still below the world average of 79 percent in 2004. Further, Cambodian educational provision is relatively more equitable and better distributed among different social groups, boy vs girl, urban vs rural, and rich vs poor, compared to Uganda. Furthermore, Cambodia has a slightly higher skilled workforce compared to Uganda, as measured in terms of the percentage of labour force with technical and vocational educations and training qualifications, and a relatively more highly skilled workforce in science and engineering, manufacturing and construction, health and welfare, and agriculture.[7] However, the overall level of human resources measured in terms of the above-mentioned qualifications is still low compared to successful countries in East Asia (as seen in Table 1.2). This is the key to why the economic performances in both countries are still low in absolute terms and in comparison to the world average and other successful countries in East Asia.

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[5] The Ease of Doing Business Index ranks economies from 1 to 183, with first place being the best. A high rank means the regulatory environment is conducive to business operation. The index ranks the simple average of a country's percentile rankings on 10 topics covered in the World Bank's Doing Business. The ranking on each topic is the simple average of the percentile rankings on its component indicators.

[6] World Bank data, Retrieved 5 June 2011, from
http://data.worldbank.org/indicator/IC.BUS.EASE.XQ;
http://data.worldbank.org/indicator/IC.FRM.CORR.ZS;
http://data.worldbank.org/indicator/IC.BUS.EASE.XQ/countries.

[7] These disciplines are classified by UNESCO in its statistical data base. This system is adopted since it is best suited for comparative purposes, as the national data classification systems between Cambodia and Uganda are not comparable.

Table 1.2 Quality of the labour force in terms of relevant skills in Cambodia, Uganda, and selected East Asian countries (2007-2008)

	% of labour force with TVET qualification	% of enrollment in TVET among new entrance labour force	% of tertiary student enrollment in science and engineering, manufacturing and construction, health and welfare, and agriculture
Cambodia	1.1	30	26.64
Uganda	0.3	5	16.42
Vietnam	20	-	19.78*
Indonesia	9.39	-	32.87
Malaysia	14.91	-	45.31
Singapore	12.48	-	53.15

* Excluding student enrollment in science.

Source: http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx; http://www.tvet-vietnam.org/tvet%20in%20vietnam_brief%20overview_080908.pdf.

Concerning the role of the state in educational development, the stagnation of educational development can be observed in some parts of the world, particularly in Sub-Saharan Africa, as a consequence of the withdrawal of the state's intervention in social service provisions such as education during Structural Adjustment Programmes, and has contributed to slow economic development. In contrast, the advancement of educational development, accompanied by the economic miracle in successful East Asian countries as a consequence of state intervention in social services such education, highlights the important role of the state in strategically designing its education system to deliver a balance between each sub-sector and different aspects of the educational provision. This success in educational development requires the state to intervene at two levels: one is educational policy design and resource allocation, and the other is policy and resource implementation.

This dissertation argues that the overall low levels of educational development in Cambodia and Uganda are due to each state's ineffectiveness in policy design and resource allocation, and especially in policy and resource implementation. And the difference in the degree of educational development between these two countries is

due to the different degrees of each state's effectiveness in policy design, resource allocation, and policy and resource implementation.

I.2 Research question

The return to peace and security in Cambodia and Uganda after their civil wars provided new opportunities for both states, through their ruling elites, to provide social services such as education to their citizens. At the same time, with assistance from donor communities, the governments of Uganda and Cambodia have implemented institutional reform such as decentralization and capacity building programs to address the issues that their education sectors are facing.

As education is considered not an end in itself but a means to achieve development in general and economic development in particular, this dissertation examines the role of the state in Cambodia and Uganda in fostering economic development via deliberate provision of skilled human resources through their education systems since the end of their civil wars. This examination involves the analysis of two related issues. The first issue of analysis in this dissertation is the examination of the relationship between education and economic development. It does so not by employing a statistical method with large cross-country studies, but by examining the change in educational progress and economic development in both countries through qualitative analysis. The second issue of analysis examines the role the states played in their interactions with the donor communities in reforming their education systems since the end of the civil wars, focusing on policy design, resource allocation, and policy and resource implementation. Therefore, this study asks two main questions:

1. What is the relationship between the educational outcomes and economic development in Cambodia and Uganda after the end of their civil wars?

2. What roles have the states played in education reform in the post-conflict context of Cambodia and Uganda?

Furthermore, the following sub-questions will be examined empirically in relation to the role of the state in education reform, the relation between education and economic development and will be answered in Chapter II, III, IV, V and VI respectively:

1. What are the educational policies' priorities in terms of policy statements and resource allocation in Cambodia and Uganda after the civil wars? And who are the actors who influence adopting policy priorities and resource allocation?
2. What are the educational outcomes of basic education in terms of coverage and distribution in Cambodia and Uganda from the end of the civil wars to the present? And who are the actors and what are the factors that influence the implementation of the education policy to expand the coverage and distribution of education in both countries?
3. What are the educational outcomes in terms of the quality of education in Cambodia and Uganda since the end of the civil wars to the present? And who are the actors and what are the factors that influence the implementation of education policies to improve the quality of education in both countries?
4. What are the educational outcomes in terms of technical and vocational education and training (TVET) and higher education in Cambodia and Uganda after the end of the civil wars to the present? And who are the actors and what are the factors that influence the implementation of the education policies to provide a balance between TVET and higher education in both countries?
5. How well do the educational outcomes in Cambodia and Uganda since the end of their civil war respond to the local labour market and economy? And what is their impact on economic development in both countries?

I.3 Theoretical framework: State, education and economic development

Based on a review of the relevant literature, this section will first show the relationship between education and economic development and then demonstrate the critical role of the state in education reform. There are two levels of the state's intervention in education reform. The first level is policy design and resource allocation, and the second level is policy and resource implementation. This literature review also discusses the characteristics of the states under study that led to successful or less than successful educational reforms. As external assistance plays a critical role in financing development in developing countries, this section also discusses the relations between the governments of developing countries and donor agencies in the policy process.

I.3.1 Education and economic growth

Since the publication of Adam Smith's 'The Wealth of Nations' in the eighteenth century, numerous studies have attempted to explain the causes of development in general and of economic growth in particular. Economic growth is considered the key as it affects every aspect of human development. Economic growth not only provides the resources for tackling poverty, social exclusion, and poor health, but also expands the range of human choices (OECD/UNESCO, 2003). Therefore, economic well-being flowing from economic output should be recognized as an important component of human well-being. From a macro perspective, the basic model to explain the source of economic growth (an increase of output in terms of GDP) is a function of factors of inputs: physical capital and labour. However, when only changes in labour and physical capital are accounted for, a large percentage of growth in output cannot be explained (Baffoe-Bonnie, 2003). Neo-classical economic theory attributes this to the improved process of technological production and defines it as 'Total Factors Productivity '.

Since the 1950s, economists such as Gary Becker, Jacob Mincer, T. Z. Schultz, and recently Robert Barro and Robert Lucas have turned their attention to education and its role in facilitating the changes in technological production that eventually led to the birth of the 'Human Capital Theory'. Lucas (1988) argues,

> Indeed, for me the development of the theory of human capital has very much altered the way I think about physical capital. We can, after all, no more directly measure a society's holding physical capital than we can its human capital. The fiction of "counting machines" is helpful in certain abstract contexts but is not at all operational or useful in actual economies – even primitive ones. (pp. 35-36)

This is because physical capital can be productive only if someone with appropriate skills and knowledge makes it operational and works in an efficient manner. Later economists attempted to include human capital theory into growth accounting models leading to the birth of the 'Endogenous Growth Theory'. Romer (1986), one of the founders of this theory, proposes a model in which economic growth in the long run is driven by the accumulation of knowledge, as human capital has an increasing rate of return while physical capital has a diminishing rate of return. A study by

OECD/UNESCO (2003) also notes that 'while financial capital investment is most strongly associated with growth at the early stages of industrialization, the role of human capital increases with industrial development and overall level of educational attainment and eventually becomes the strongest driver of economic growth' (p. 8).

During the last two decades, numerous studies have attempted to empirically prove endogenous growth theory. Some studies show that the evidence of a positive effect of education on a country's growth rate is tenuous. These studies emphasize the role of economic institutions and business-friendly environments (macro-economic stability, a well-defined system of property rights, an openness of the economy, and right incentives), and good governance as the fundamental causes of differences in economic performances, rather than the differences in human capital (Benhabib and Spiegel, 1994; López et al., 1998; Easterly, 2001). Although economic institutions, business-friendly environments, and good governance are necessary, they are not sufficient conditions to ensure a prosperous economy. Economists of education argue that a nation's prosperity, especially in the era of global trade depends on its competitiveness, which is based on the productivity of goods and services (Thoraxy, 2006). This competitive capacity depends on the human capital, as physical capital and natural resources are passive factors in production. As Economist magazine argues 'the last lesson is probably the most important: investing in education pays in spades. The tiger's single biggest source of competitive advantage is their well-educated workers' (Economist, 1991).

Still, there are empirical studies and theoretical debates that place some doubt on the human capital theory. Schooling just serves as a ranking and screening in the process of job recruitment, which credentialist Weiss (1995) calls a sorting model. For the credentialist, there is no direct link between education and increased productivity that leads to the economic growth (Bill, 1988; 2003; Weiss, 1995). However, this credentialist theory focuses on more advanced developed countries rather than on poor developing countries. Therefore, it is not applicable in the case of Cambodia and Uganda in this study. In fact, there is a general agreement, especially in the context of post-conflict countries where human capital stock has declined, that investment in education is the key not only to bringing about economic development, but also to

effectively implementing the development plan. Positively, studies have found that a country that reaches a critical mass of human capital can experience a high growth rate, while those that have not, not only experience slow growth, but also stalled development and persistent poverty (Lucas, 1988; De Menlemeester and Rochat, 1995; Alhas, 2005). On average, countries that improve literacy rates by 20 to 30 percent have seen increases in GDP of 8 to 16 percent, especially in the low and middle-income countries (Basic Education Coalition, 2004, p. 7). Empirically, Ramirez et al. (2006) also found that the relation between education and economic development is strong in low-developing countries.

This does not, however, mean that education in general will automatically boost economic growth. A more refined empirical analysis as discussed in the following section shows that variations in the impact of education on economic growth depend on the nature of its provision, quality, accessibility, and orientation. In other words, to reap the greatest potential from an investment in education, it is important to ensure that educational provision corresponds to a country's economic and labour market conditions and structure, and level of technological development. If the labour market and economy are unable to absorb the graduates, they will remain underutilized or, even worse, unemployed; or if the education system is not able to produce the appropriate mix of human resources for the labour market, the economy will continue to perform below its potential (World Bank, 2006, pp. 94-95). This led me to focus on three aspects of educational provision that contribute to the sustainable economic development: level and distribution of educational provision, quality of educational provision, and relevance of educational provision in relation to the structure of the labour market and economy.

Level, quality and distribution of education

Level of education

Cross-country studies suggest that the growth effect of each educational level differs among countries with different economic maturity. Since 1980s, empirical studies consistently confirm that the role of primary followed by secondary education is more important in developing countries, especially at the early stages of development. For example, studies of East Asian success stories noted that before the growth, primary

education was the largest single contributor to economic growth rates and the most important factor in the difference between the East Asian economic boom and the slow growth of Sub-Saharan Africa (World Bank 1995, p. 5; Basic Coalition Education, 2004, p. 7). For developed countries and for East Asian countries at their later stages of development, economic growth depended mainly on higher education.

The results actually reflect the availability of human capital and the nature of the economy and labour market of a given country. Solmon (1985, p. 274) argues that in a country where a large proportion of the working population depends upon agriculture and where the rate of illiteracy is very high, investment in primary then secondary education provides opportunities that ought to be high priority on economic grounds. For developed countries, higher education should be given more emphasis because these countries have not only achieved near universal primary and secondary educations, but also they require higher skilled labour as they have already reached a high level of development, moving from agriculture to industry and service sectors.

Further, the studies reveal that primary followed by secondary educations have a high rate of social return compared to higher education, which has a high rate of private return (for more details see Psacharopoulos, 1994; 2004; Petrakis and Stamatakis, 2002; Self and Grabowski, 2004). For developing countries, the priority given to primary then secondary educations is not only limited to their current economic benefits and higher (social) rate of return, but also lays the foundation for further higher education as their economies continue to grow. This correlation was observed in developed countries in general and in the East Asian successful model in particular.

Quality of distribution of education

Reviewing studies that found a negative correlation between education and economic growth reveal that their conclusions were based on the analysis of years of schooling as the measurement of education, neglecting qualitative differences, and issues of equitable access to education. This negligence seems even more severe in cross-country comparisons than in analyses of an individual country. Who would sensibly assume that average pupils in schools in Cambodia and Uganda would gain the same amount of knowledge in any year of schooling as average pupils in schools in

Singapore, the USA, or Western European countries? Or that poor rural children have access to at least a basic education as compared to rich urban children within Cambodia and Uganda? Therefore, rather than counting how long students have sat in school, it is crucial to focus on how much students have learned while in school and how equally education is distributed when estimating the effect of education on economic growth.

The different level of economic development rises dramatically when quality of education is taken into account. Studies suggest that 'one country-level standard deviation higher test performance would yield around one percentage point higher annual growth rates. The effect of years of schooling is greatly reduced by including quality, leaving it mostly insignificant. At the same time, adding the other factors leaves the effects of quality basically unchanged' (Hanushek and Wößmann, 2007, p. 41). Further, the effect of educational quality on economic growth seems to be significantly larger in countries with effective institutional framework so that good institutional and educational quality can reinforce each other in advancing economic development (Hanushek and Wößmann, 2007, p. 41).

Other studies show a positive correlation between educational and institutional quality improvements in the long run (Mamoon and Murshed, 2009). This provides even stronger incentives to improve the quality of education, especially for developing countries because, according to newly developed data on international comparisons of cognitive skills (also employed in the analysis of growth), education deficits in developing countries are larger than previously appreciated (Hanushek and Wößmann, 2007). It is within this context that Hanushek and Wößmann (2007) argue, 'The magnitude of change needed makes clear that closing the economic gap with developed countries will require major structural changes in schooling institutions in the developing countries' (p. 41).

Other studies found out that education can have negative effects on overall economic growth when formal education is unevenly provided. Such uneven provision perpetuates income disparities/inequality (Adams, 2002, p. 1; Thomas et al., 2000). Samoff (1990) argues that sustained economic growth cannot be achieved by

increasing inequality. A study by Thomas et al. (2000) also reveals that a common feature among countries experiencing slow economic growth is the unequal distribution of education attainment among their populations. The logic of this argument is twofold. First, the unequal distribution of education attainment among their populations excludes a large and more diversified population from participating in economic activities. Second and consequentially, it reduces investment rates. Lower investments will lead to a lack of economic diversification, which in turn not only limits the growth rate, but also puts the economic foundation at risk as it has a narrow base. On the contrary, providing education for all, especially for the poor, not only helps to reduce income inequality, but also improves market efficiency and productivity because of the rising number of educated workers in the labour market (Romer, 2002). Therefore, as Castelló and Doménech (2002, p. 199) recommended, educational policies formulated with an objective of promoting sustained economic growth should not only take into account the level and quality but also the equitable provision of education at different levels of education.

Type (Relevancy) of Education

The Asian Development Bank (ADB) argues that the external efficiency of education can be measured, namely, 'whether an education system prepares the young generation in an appropriate, relevant and economic way for the requirements and necessity of the [present and] future' (As quoted in Koo 1999, p. 71). Within this context, the level, quality, and provision of education cannot explain the types of knowledge that graduates learn. In addition, one must raise the issue of education as linked to the needs of the present and the future labour markets and economic growth at the macro level. Therefore, the idea of relevancy of educational content and focus to the structure of the economy and the labour market of a country must be assessed in order to see the direct linkages between education and economic growth.

During the past two decades, empirical evidence has shown a strong relation between science achievement and economic growth. The estimated effect implies that a one-standard-deviation increase in science test scores — by 1.0 — would raise the growth rate impact by 1.0 percent per year (Hanushek and Kimbo, 2000; Barro, 2002). Also, empirical studies reveal that countries with relatively more enrollment in technical

and vocational training and education and with relatively more natural science, engineering, and technology college majors grow faster and are better able to transform their economic structure to more economic development more rapidly than countries with higher enrollments in general education and countries with relatively more law, business, social sciences, humanities, and art (Hanushek and Wößmann, 2007; Wolff and Gittleman, 1993; Mason and Ark, 1992; Haq and Haq, 1998; World Bank, 1999; DFID, 2007).

The successful economic development of East Asian countries was grounded in education systems that focused heavily on technical and vocational training and education, and higher education that emphasized the natural sciences, engineering, and technology (Rapley, 2007; Woo, 1991; De Menlemeester and Rochat, 1995; Morris, 1996; Lin, 2004). For example, Koo (1999) points out that Singapore's early growth strategy was formulated along two lines. The first is the concern over the development of its human resources, while the other is an emphasis more on a technical method of accelerating the expansion of the manufacturing sector in an attempt to restructure and diversify the economy. Consequently, the school structure in Singapore has been diversified in favor of technical and vocational educations, and admission into tertiary education institutions is merit based; and the central goal was to build a highly skilled workforce in science, engineering, manufacturing, construction, and technology rather than a supply-driven and bloated tertiary education system. This restructured the formal education system in Singapore in 1968.

This policy linking the economy, the labour market, and education into an integrated policy/practice has underscored the importance Singapore has given to the investment in middle and highly skilled manpower (Koo, 1999 p. 72). In this sense, these skills are closely oriented towards labor market need. Further, these skills help to accelerate the expansion of the manufacturing and industrial sectors, thus speeding up development processes. For example, it took Britain and the United States about 50 years to double their real per capita income, while it took South Korea and Singapore only about a decade because the latter countries' education systems emphasized vocational and technical training and education and natural sciences, technology, and engineering education at the higher education level.

I.3.2 The role of the state in educational development: Modern rational legal bureaucracy vs neopatrimonial bureaucracy

Analysis of the role of education in promoting sustained economic growth through improved technological production offers hope — other factors being equal — for the developing countries to catch up with advanced developed countries once they increase the level of education among their labour forces (De Menlemeester and Rochat, 1995, p. 351). Emphasis on the role of education in economic growth, especially in the East Asian countries leads to a review on how their education systems were developed. Lewin (1993, p. 84) argues the problem is not to demonstrate the link between education and development, but the real question seems to revolve around the efficiency of the educational delivery system.

The stagnation of educational development in Sub-Saharan Africa during the Structural Adjustment Program (SAP) of the 1980s and early 1990s, which resulted from the withdrawal of the state's intervention in educational provision and the advancement of educational development in East Asia through state intervention, brought back the centrality of the state in the debate on educational provision and development among academic as well as multilateral and bilateral development agencies. Further, countries with strong market-based economies have a functioning and capable state in many policy areas including educational provision. In developing countries, state intervention in educational provision is even more crucial, not only limited to facilitating economic growth, but also as a response to calls for human rights and social justice as the population and especially the poor depend heavily on services provided by the public sector and less on the private sector (Psacharopoulos, 1991; Bray, 2002). Therefore, the question arises: What are the characteristics of the state in cases where such educational interventions have been successful or less successful?

In answering why during the last several decades some countries have been able to develop their economies while others have not, many scholars such as Atul Kohli (2004) and Francis Fukuyama (2005) argue that a state's capacity/strength is the key to success as evidenced by the emergence of effective states, especially in the field of

educational provision within the developing world, which have generally preceded the emergence of industrializing economies. Joseph E. Stiglitz, in his 2001 Nobel Prize Lecture, notes, 'There is no prescription for how a country creates such a culture [of knowledge] … But government does have a role – a role in education, in encouraging the kind of creativity and risk taking that the scientific entrepreneurship requires in creating the institutions that facilitate ideas being brought into fruition' (World Bank 2007, p. xiii).

The state's strength/capacity to create this kind of institution can be achieved only through a modern Weberian rational bureaucracy. As Fukuyama (2005) argues, this modern Weberian bureaucracy provides the state with, 'the ability to formulate and carry out policies and enact laws, to administrate efficiently …, to control graft, corruption, and bribery, to maintain a high level of transparency and accountability in government institutions, and most important, to enforce laws' (p. 12). In other words, this formal structure is a blueprint for activities which includes, first of all, the table of organization, a list of offices, departments, positions, and programs. These elements are linked by explicit goals and policies that make up a rational theory of how, and to what end, activities are to be fitted together. The essence of a modern bureaucratic organization lies in the rationalized and impersonal character of these structural elements and goals that link them together. (Meyer and Rowan, 1997, pp. 341-342)

Officials in such modern rational bureaucracy and their relation within it are characterized by a high degree of administrative competence, meritocracy, impartiality, salary-based compensation, full-time employment, a set hierarchical chain of command, and rule-based procedures. Consequently, officials in this rational bureaucracy will not engage in politics or act under political influence, but will run their institutions according to their technical and professional capacity with long-term career outlooks that generally bring about positive service delivery (Laking, 2010, p. 42; Fritz and Menocal, 2006). In sum, this success in education development is brought about by the state's strength/capacity on two levels; first, on the level of policy design and resource allocation adopted through technical/professional capacity, and, second, on the level of policy and resource implementation.

Getting the right policy formulated and then allocating resources accordingly is the first priority. The educational successes of East Asian countries did not happen by accident, but through state intervention, especially at the early stages of development (Seng, 2008 , p. 39). The Weberian state had historical precedents in Asian societies where the political elites — aiming to achieve rapid economic development — not only were able to effectively appoint competent officials to key positions to form a meritocratic bureaucracy, but also gave power and authority to the bureaucracy to plan policies (Fukuyama, 2005, p. 40; Akyüz et al., 1998, p. 28; Amsden, 1993; Abe, 2006, p. 8).

In the case of Taiwan, the Ministry of Education set enrollment distributions across levels and types of education, eventually leading to enrollment quotas and allocated a budget accordingly through 'the science (or art) of education planning wherein limited resources of a country are marshaled to develop most effectively its human resources' (Woo, 1991 , p. 1029). In the Singaporean case, subsequent to the initial growth of the economy, educational expansion was largely sequential, with first priority given to primary, then later to secondary education and, most recently, to higher education. At the same time, the school structure of Singapore was diversified in favor of technical and vocational training and higher education that emphasized science, engineering, manufacturing, construction, and technology (Morris, 1996; Seng, 2008). Further, strategies to improve the quality of education were also adopted.

The second priority, but of great importance, is the implementation of the policy and resources. Experiences from East Asian countries reveal that the success of education development is not only due to the right intervention at the level of policy design and resource allocation, but also of policy and resource implementation. The meritocratic bureaucracy in East Asian countries resulted in two positive states' actions which led to successful policy and resource implementation. 'First it rationalizes the organization of social relations, which is necessary for the transfer of information and resources that makes possible effective and coordinated action, and second it controls over state actors, which is necessary for actually getting state agents to act as required for the goals pursued' (Lange and Rueschemeyer, 2005, p. 7).

This does not, however, mean that East Asian countries could develop themselves without external assistance, especially at their early stage of development. What the developmental state of successful East Asian countries did was to direct the external assistance towards achieving their development objective through their meritocratic bureaucracies, and not have development objectives dictated by external actors.

Except in the few countries where foreign aid is effective, many poor developing countries that receive substantial aid flows have not seen any significant improvement in either the socio-economic or political fields. The interactions between the governments of developing countries and international development agencies generate a lot of debate on who actually has power over policy design, resource allocation, and implementation that enables or hinders efforts to bring about development such as in the education sector. The most common critiques in aid effectiveness point out that much aid through international development agencies comes with imposed agendas that can ultimately shape policy decisions and processes. King (2007) notes that since 1990 the multilateral agencies have played a dominant role in the construction of a series of goals and targets for development, including the education sector. This process undermines local initiatives in formulating their own goals and targets on how their education system should be developed.

The issue is complicated by different agendas and implementation units among different donors. On the international level, Fritz and Menocal (2006) note that during the last 50 years, the number of international donor agencies has increased dramatically, recently reaching over 90. This increase, they claim, 'has created significant problems, including a multiplicity of agendas and purposes, poor coordination. … Fragmentation also creates collective action problems among donors and contributes to a degree of irresponsibility, as no individual donor can really be blamed or credited for the overall development of a country or even a sector' (Fritz and Menocal, 2006 , p. 20).

Since the late 1990s, in response to the criticism over aid ineffectiveness, the Sector-Wide Approach (SWAp)[8], a new aid approach to policy processes, whose key words are 'partnership' and 'ownership', was introduced by the donor community. The introduction of SWAp leads to a renewal of the role of the state in policy design and resource allocation, while limiting the role of international development agencies to only financial support of the developing countries' development plans.

Still, a critique states that behind the curtain of country 'ownership' and donor alignment with recipient countries' priorities and frameworks, the donor still plays a critical role in agenda setting. Regarding this, Little (2000) notes that the role of international development agencies is not limited to only financing the education reform in developing countries, but also attempts to correct the shortcomings of their policies through technical assistance. In the education sector, considerable donor assistance has been directed recently towards building the central strategic and decision-making capacities of poor developing countries, with an emphasis on achieving universal primary education. This followed the international agenda set at the International Conferences on Education for All in 1990, 2000, and the Millennium Development Goals (Laking, 2010, p. 42). For example, the establishment of the Educational for All-Fast Track Initiative Fund was designed to support only low-income countries that show a strong political commitment towards implementing basic education.

Others conclude differently, that this 'forced consensus' has not always been able to bend the commitment of governments and bureaucracies that sometimes opposed the reforms they were supposed to implement, leading to frequent instances of policy reversals that undermined long-term development efforts. Fritz and Menocal (2006) also conclude that the stagnation of development in poor developing countries, particularly in Africa, is contingent on Africans 'getting their policies right', rather than on donor agencies. This is the result of the absence of capable institutions or a modern rational bureaucracy in Weberian terms to effectively align donor and state

[8] SWAp is generally defined as all significant funding for the sectors from international development agencies that support a single sector policy and expenditure, under the leadership of developing government.

incentives for strong development performances based on their own countries' situational analysis.

As discussed above, the historic experience of successful East Asian countries teaches us that a meritocratic bureaucracy is able to direct external assistance toward its developmental goals. Within this context, Fukuyama (2005) argues, 'A critical issue facing poor countries that blocks their possibilities for … development is their inadequate level of institutional development' (p. 162). Therefore, the question should be raised why poor developing countries are not able to develop adequate levels of institutional capacity.

Max Weber distinguished two types of institutions. The first type is modern rational legal institutions that serve as an impersonal source of individual power under which meritocratic bureaucracy often flourishes. The second is the patrimonial institutions that are the expression of power relationships involving individuals or groups, and who use 'personal ties' to perpetuate their domination of these individuals or groups. Meyer and Rowan (1977) note that the formal legal rational institutions are usually subjected to the existing pattern or social structure that uses formal institution to legitimatize or secure its survival and strengthen its support. The existence and prosperity of such a phenomenon in modern societies is called 'neopatrimonialism'.

A neopatrimonial state is a 'hybrid regime', where rational-legal institutions and traditional patterns of rule co-exist. As with classic patrimonialism, the right to rule is ascribed to a person rather than an office, and the appointment is based on the giving and granting of favours rather than on merit. The pattern stretches from the village level to the highest reaches of the central state. Consequently, the distinction between private and public interests is purposely blurred (Bratton and Van de Walle, 1994, p. 458; Van de Walle 2001, p. 51). These are the central themes in policy process that hinder the ability to formulate policy, allocate budget, and implement the policies and resources to optimize the public good (Ndulu and O'Connell, 1999).

In a neo-patrimonial state, as observed by Cammack (2007), the real power and real decision making 'lie outside formal institutions. Instead, decisions about resources are

made by "big men" and their cronies, who are linked by "informal" (private and personal, patronage and clientelist) networks that exist outside (before, beyond and despite) the state structure' (p. 600). Consequently, policy-making in a neo-patrimonial state has taken on a purely political direction. These policies are no longer driven by logic to yield development but rather are intended to yield benefits for a limited group with ultimate concern of building clientele networks to maintain themselves in power and acquire personal wealth (Fritz and Menocal, 2006). Sindzingre (2010) argues that one factor that hinders the neopatrimonial states from strategically developing their education is that their political consolidation and personal wealth acquisition often rely on the allocation of rents from natural resources that do not require skilled workers, rather than from an industrial base that requires human capital to succeed. Within this context, among others, educational policy making in neopatrimonial states is characterised by two important problems: inconsistency of policy and lack of policy revision based on situational analysis. Education policy changes by bureaucrats get support from ruling elites, or sometimes ruling elites themselves would initiate education policy only when it provides them with political support, especially to win elections.

Even in some cases where a common agenda can be found among stakeholders, which leads to the adaptation of the strategic policies to address the local issues, and resources are allocated accordingly, the empirical case studies and cross-countries comparisons of neopatrimonial states during the last two decades reveal that the intended outcomes are often not materialized. The idea of taking implementation seriously is that 'Even if the state elites make a correct diagnosis of the kind of intervention that is indicated and have the political will and command over material resources necessary to undertake the action, they may not be able to carry it out simply because the required bureaucratic machinery cannot be created in time' (Rueschemeyer and Evans, 1993, p. 51). In some other cases, bureaucrats are not able to act independently from political influence. There is a growing consensus that implementation is constrained not only by technical capacity and resources, but also by neopatrimonial politics.

As discussed above, the ruling elites in a neopatrimonial state are dependent on the support of their clients both within the state and the society. Therefore, 'it is no accident that neopatrimonial states are burdened by bureaucracies whose appointments are made according to tests of loyalty' (Cammack, 2007, pp. 601-602), and licenses, contracts, and projects are awarded by public officials as personal favours, rather than on 'legal-rational' mechanisms such as the rule of law, meritocracy, and political accountability.

When legal rules are absent, states lack effective mechanisms for the control of a large number of state actors. This, in turn, promotes rampant rent-seeking and unstable hierarchies of power dominated by individuals. Such personal rule frees state actors to use their coercive power to indiscriminately prey on others for personal gain and aggrandizement (Evans, 2005). This frequently leads to inferior implementation, undermining development possibilities that are already restricted by social and economic constraints (Cromwell and Chintedza, 2005). In everyday experience, it is probably the notion of corruption that is most comprehensible as the visible result of the described neopatrimonial system. This is because first, 'public funds [are] siphoned off to spend on political projects [personal gain]. Second, such public servants are generally poorly paid and demoralized; they learn that corruption goes unpunished and they act accordingly' (Cammack, 2007, pp. 601-602).

Awarding licenses, contracts, and projects that provide key services and utilities to corporate cronies can lead to primacy of commercial interests over public services. These activities are well categorized anti-development behavior, or lack of development-oriented policies. Consequently, the quality, predictability, and delivery of public services suffer; not only are the core services and functions disrupted, but inequitable access is also reinforced (Bratton and Van de Walle, 1994, p. 458).

However, assuming that all politically motivated projects impede development per se is unjustified. One should bear in mind that in some instances political elites/ruling parties that have the objective of promoting political legitimacy and sustaining themselves in power, especially via elections, would pursue development projects rigorously. In some cases, they are even more creative in financing projects (in

accordance with the prioritized needs of the country) as long as the projects help them win elections, while projects that would not help them gain legitimacy are not be pursued. In this sense, there is also another mechanism by which the state's responsiveness to national development projects can be demanded from within the state. Francis Fukuyama (2005) also notices that ultimately

> it is the people whom government supposedly serves who are responsible for monitoring its performance and demanding responsive behavior. Society organized into cohesive groups – whether in the form of parent-teacher associations, watchdog groups, or advocacy organization – is much more likely to demand and receive accountability than consisting of disorganized individuals. On the other hand, civil society can degenerate into rent-seeking interest groups whose goal is not greater accountability but an increase in the scope of government subsidies or the substitution of government for civil society. (p. 41)

I.4 Research methodology

1.4.1 Timeframe of the study

The period of the analysis of this study is from the end of their respective civil wars, 1993 for Cambodia and 1986 for Uganda, to the present. There are a number of factors underlying the selection of this period. First, after the end of the civil wars and social upheaval, the governments of both countries officially considered the education sector as one of the most important sectors in their efforts to rebuild their countries. Second, donor communities have contributed significant resources to the education sector in both countries. Third, as far as the Cambodian case is concerned, I could relate this research to my own personal experiences, first as a student at high school and then as a university student from 1992 to 1999. In early 2000, I was also engaged in pedagogical training with three months at the faculty of pedagogy, recently renamed the Institute of National Education, before I left the country for post-graduate study. After returning to Cambodia in 2003 upon the completion of my post-graduate training in the Philippines, I volunteered to teach at the Royal University of Phnom Penh until 2005 when I officially became employed as a full lecturer. Since 2003, I have actively been involved in social development work, serving as a trainer and curriculum developer for local NGOs, and as a youth empowerment coordinator

working with students from various higher education institutes. My work has taken me to almost every corner of Cambodia where I observed and discussed many development challenges, especially educational problems. Therefore, my experiences contribute to in-depth observations, reflection, and analysis regarding these periods.

I.4.2 Scope of the study

This study, besides its policy-oriented objective, aims to contribute in-depth empirical analysis to the study of the relationship between education policies and economic development in the least developing countries. In order to produce a nuanced empirical study on education policy processes, this dissertation incorporates qualitative methods. The qualitative research processes consisted of focus group discussions, interviews, personal conversations, and desk-based research. This type of method can help us understand the different influences among specialized ministries, political ruling elites, and donors in the process of education policy design, resource allocation, and implementation.

I.4.3 Fieldwork and data collection

This study uses data from interviews gathered from one year of fieldwork in Cambodia (August 2008-March 2009) and Uganda (March-September 2009). To augment data collected from fieldwork, this study incorporates a number of sources published by multilateral institutions, government ministries, international and national non-governmental organizations, and scholarly journal articles and books.

Interviews, personal conversations, and group discussions

Interviews were conducted with people from different sectors of the countries. From the education sectors, interviewees included representatives of government in the education sectors, school administrators, university administrators, professors, teachers, and students. From the international institutions, the interviewees included officials who worked in the education sectors as technical advisors to the government, and project managers. The interviews were conducted using a semi-structured format. In addition, teacher and student group discussions are also conducted in order to generate more insights into the issues from the stakeholders' perspectives. Further, this study also incorporates personal conversations that were crucial in helping me

gain access to sensitive information related to phenomenon known as neo-patrimonial politics and corruption within both countries.

School selection and observation

Five Cambodian provinces and the capital city (Kampong Cham, Prey Veng, Svay Rieng, Pursat, and Sihanouk Provinces, and Phnom Penh, the capital city), and five Ugandan districts and the capital city (Mbarara, Wakiso, Ntungamo, Mbale, and Jinja Districts and Kampala, the capital city) were selected. This selection constitutes representative samples in terms of geography (urban, rural and remote areas), educational accessibility, and level of economic development. After consulting knowledgeable informants, this study randomly selected one rural primary and secondary school from each province/district for visits during school hours in order to observe teaching and other school activities. This process was also adopted in two urban areas in both countries. In addition, as post-basic-education institutes in Cambodia and Uganda predominantly exist in urban areas, this study randomly selected two tertiary education institutions, one private and one public from each urban area for school observation.

I.5 Significance of the study

Although currently there has been an increasing number of comparative studies between Southeast Asia and Sub-Saharan Africa, so far, to the best of my knowledge, there is only one comparative study between Cambodia and Uganda, 'Poverty and User Fee for Public Healthcare in Low-income Countries: Lessons from Uganda and Cambodia'. In this comparison, Meessen et al. (2006) demonstrate how different policy initiatives aimed at improving access for the poor to healthcare can be achieved and implemented. Further, it should be noted that this rare comparative study between the two countries was carried out by foreign scholars. So my study will form an endogenous effort to contribute to the literature on the comparative study between the two countries by focusing on educational policy initiatives that both countries pursue with the objective of promoting economic development.

There are a number of single case studies on Cambodian and Ugandan education respectively; however, most of these studies focus on the specific issues faced by the

sub-sector in the field of education, rather than addressing the whole education sector. Further, there is no study linking education and economic development in a holistic approach that discusses the responsiveness of coverage, distribution, quality, and type (relevancy) of education to the local labor market needs and level of economic development in order to generate recommendations for the educational policy formulation process. In addition, many of the studies in Cambodia and Uganda seem to focus on educational policy implementation at the sub-sector level rather than on why such policies are pursued and who influences the policy making.

This study also aims at understanding how educational policy processes (policy design, resource allocation, and policy implementation) occur in modern Cambodia and Uganda. Using the concept of neopatrimonialism, this study aims at contributing empirically to the analysis of the influence of different actors and factors on educational policy design, resource allocation, and their implementation in Cambodia and Uganda after the end of their civil wars to the present and its implications for economic development performance.

The impact of neopatrimonial practices that is involved in the formulation and reform of educational policy has not been systematically studied. In his study on Cambodian education and development, David Ayres (1999; 2000a; 2000b) argues that since independence, the educational policy in Cambodia has suffered from political interference and patronage politics. His study ends in the year 1998. Since the turn of millennium, the situation in Cambodia has changed dramatically in terms of economic, social, and political aspects. As far as the education sector is concerned, the Cambodian government has adopted many new policy initiatives. At the same time, donor investment has also increased with some modified strategies. Therefore, this study will supplement previous studies by examining evolution in policy formulation and implementation in the education sector.

Further, this study's comparative dimension might shed light on past policy failures and shortcomings. As such it will provide policy-relevant analysis to policy makers and other stakeholders in Cambodia and Uganda. Findings from this study will contribute to policy formulation processes aimed at improving overall responsiveness

of education to the local labour market and economic needs. As such it will contribute to the economic development and welfare for the people of Uganda and Cambodia. This study might also reveal other interesting issues for further research so that more knowledge can be exchanged to meet the desire for alternatives in development intervention in the education sector.

I.6 Outline of the dissertation

This dissertation is structured as follows:

Chapter II analyses education policy and finance in Cambodia and Uganda. This chapter focuses on four major points. First, it reviews the historical background of both countries, focusing on two aspects, political development and educational development from the end of colonialism to the end of civil war. Second, it reviews the commitment of the Cambodian and Ugandan governments to rebuild their education systems from the resources allocated to the education sector out of the total public expenditures. Third, it examines education's priority investments in terms of its sub-sectors — level, type, and subject content of educational provision — as reflected in education's policy statement and resource allocations. Finally, it assesses the different influences among specialized ministries, political ruling elites, and donors in the policy process of prioritizing education sub-sectors and resource allocations.

Chapter III examines educational outcomes in terms of coverage and distribution of basic education. This chapter focuses on two major points. The first point is to briefly present the educational outcomes and factors affecting Cambodia between 1993-1999 and Uganda between 1986-1997. Then it presents the educational outcomes in basic education in both countries from the end of the previous century to the present as the educational reforms reached a momentum in both countries, as reflected in increases in budget allocations to basic education, although to varying degrees. This compares the changes in basic education in each of the two countries over time. Then it analyses the different influences among specialized ministries, political ruling elites, and donors in the process of educational policy implementation to expand the coverage and distribution of educational provisions in both countries. The second point is to compare the educational outcomes in both countries. Then it identifies the factors that led to different educational results in Cambodia and Uganda.

Chapter IV examines the educational outcomes in terms of quality of basic education. This chapter is divided into three sections. The first section presents quality of education in both countries. It also shows that the quality of education varies not only between countries but also within both countries. The second section explores the factors that determine quality education in both countries. It shows that quality of education is a result of the impact of the education system as well as exogenous factors. This section is divided into two parts. The first part examines the wider socio-economic and political environment that affects the quality of education. The second part examines the different influences among specialized ministries, political ruling elites, and donors over the quality of their education systems. The quality of the education system is examined through the use of the official instruction hours and the quality of teaching. The third section compares quality of basic education in Cambodia and Uganda. Then it identifies the factors that led to different qualities of basic education in Cambodia and Uganda.

Chapter V examines the relevance of educational provision to the needs of the local labour market and the economy in Cambodia and Uganda since the end of the civil wars. This chapter is divided into three sections. The first section examines the structure of labour markets and economies in Cambodia and Uganda and their implication for skilled requirements. The second section analyses the situation of technical and vocational skill provisions in both countries and the factors that affect such provisions. The third section analyses the situation of higher education in both countries and the factors that affect such provisions.

Chapter VI examines the relationship between these educational outcomes and economic development in Cambodia and Uganda. This chapter first reviews in a comparative perspective the key economic development indicators in terms of poverty, inequality, and GDP (per capita) in both countries since the end of the civil wars and the prognosis for their futures. It then discusses, based on the existing literature and fieldwork, the role of education in contributing to economic development in both countries after the end of the civil wars.

The conclusion, Chapter VII, draws the lesson learned from the analysis of educational policy processes in Cambodia and Uganda, focusing on analysis of the positive contributions of education to sustainable economic development and recommendations on how best to pursue educational reform.

CHAPTER II

EDUCATION POLICY AND FINANCE

A just society has to solve the possible tension
between the benefits of education for individuals
and their society to the satisfaction of both.
M. Griffiths (2003, p. 23)

II.1 Introduction

The discussion in the theoretical framework in Chapter I demonstrates that at the early stages of development, especially for poor developing countries, investment in basic education has a more positive impact on a country's economic development compared to post-basic education. Therefore, such investment should be prioritized. In post-basic education, technical and vocational education and training (TVET) should be given more focus than higher education for the investment to have a more positive impact on the economy. Further, within higher education, scientific, technological and engineering, the disciplines of manufacturing and construction have a greater positive impact on the economy compared to social science, business, humanities, and arts, thus must be given more priority. All of these must be accompanied by equitable access and acceptable quality. In this sense, education consists of different yet interrelated levels with mutual effects. These levels and types of education in turn produce a mix of human capital that a country can use to pursue its development objectives (World Bank, 2008b, p. 166).

Therefore, a well-developed national education system with sound policy design and financial resource allocation is required to achieve desirable outcomes. Although, the actual results still depend on how policy and resources are implemented, policy and especially resource allocation are the indications of de facto priority; without them implementation is impossible. This chapter, therefore, examines the education policy design and resource allocation in Cambodia and Uganda after the end of the civil wars. This chapter first examines the historical background of political development and educational development in Cambodia and Uganda. Second, it analyses the public expenditures on education since the end of the civil wars in both countries by seeking to answer how political elites, the Ministries of Education, and external factors such as donors and NGOs influence decision making on resource allocation to the education sector. Third, it examines the situation in Cambodia and Uganda after the

end of the civil wars regarding the respective country's policy priorities on sub-sectors of education (basic education, TVET, and higher education) and the extent to which financial resource allocation reflects their policy priorities. Also, it examines what role political elites, Ministries of Education, and external factors such as donors and NGOs play in influencing priorities and financial resource allocation. The final section presents the concluding remarks.

II.2 Historical background of Cambodia and Uganda

II.2.1 Political developments since colonialism

Cambodia and Uganda were under French and British colonial protectorates for almost a century before they gained independence in 1953 and 1962 respectively. After gaining its independence, Cambodia enjoyed relative political stability until the late 1960s during which time extensive infrastructure was put in place by Prince Norodom Sihanouk. However, the Cold War conflict, especially the Vietnam War, affected Cambodia. In 1970, Prince Sihanouk was overthrown by his General Lon Nol who was backed by the United States. Sihanouk then fled to Beijing and allied himself with communist forces (Khmer Rouge) under Pol Pot to form the National United Front of Kampuchea to oppose the US-backed Republic. Seizing control over the capital Phnom Penh in April 1975, the Khmer Rouge founded Democratic Kampuchea based on an extreme Maoist form of communism.

The people welcomed the Khmer Rouge with the hope that it meant an end to civil war and a time of peace and development. On the contrary, during this autocratic rule, Cambodia suffered extreme social and political violence. All existing political and socio-economic institutions were arbitrarily dismantled and the civil service dissolved. In other words, the Khmer Rouge regime was a massive experiment in social engineering where the urban population was driven into the countryside and virtually the entire population was forced into intensive agricultural activities with heavy workloads, little food, and almost no medical care. By the time the regime collapsed after a Vietnamese military intervention in early 1979, approximately 1.7 million Cambodians had died of starvation, overwork, execution, and disease.

Throughout the 1980s, Cambodia continued to fight a civil war between the Phnom Penh government, backed by an occupying Vietnamese army and Russian aid, and the Khmer Rouge and other non-communist resistance factions – the National United Front for an Independent, Neutral, Peaceful and Co-operative Cambodia (FUNCINPEC), and the Khmer People's National Liberation Front (KPNLF) funded by China, the United States and other Western counties. The changes in the world political order, due to the fall of Berlin Wall in 1989 and the fall of the Union of Soviet Socialist Republic (USSR), paved the way for a comprehensive political settlement in Cambodia. The Paris Peace Agreement was signed on 23 October 1991 by the four factions, ending the civil war and bringing peace to Cambodia. The Paris Peace Agreement provided the mandate for UNTAC (United Nation Transitional Authority in Cambodia), a peace-keeping force, to implement the terms of the agreement that paved the way for general elections.

The general election was held in May 1993 and a majority of people voted, despite the withdrawal of the Khmer Rouge from the process. Unfortunately, after the election a political problem arose with regard to the transfer of power. The CPP (Cambodian People's Party), which led the country since the end of the Khmer Rouge regime, lost to the FUNCIPEC but strongly rejected the outcome and claimed the election was rigged. Immediately thereafter, high-ranking party members of the CPP formed a secession movement and threatened to divide the country in two if they were not allowed a share of power. Eventually, under an arrangement brokered by King Sihanouk, a new coalition government was formed in which Prince Ranariddh of the FUNCIPEC was to act as First Prime Minister and Hun Sen of the CCP as Second Prime Minister. It was under these coalition politics that the tasks of rebuilding the country began. Since then, Cambodia has held regular general elections with participation from multiple political parties, which have been generally described as relatively free and fair. However, it is important to note that over time the CPP has become stronger and finally consolidated its power in the late 2000s.

In Uganda, the 1962 election gave birth to the federal constitution in which Milton Obote, founder of the UPC (Uganda People's Congress), a party drawing its support from the northern regions of the country, became Prime Minister, and Mutesa II, the

King of Buganda Kingdom situated in the southern part of the country, which is by far the most powerful kingdom among Uganda's four traditional kingdoms, became the president. In contrast to Cambodia where conflict was partly a product of international conflict, in Uganda the political turmoil was caused by domestic rivalries. The coalition between Obote and Mutesa II proved to be short-lived. In 1966 the deteriorating relationship between the two came to an abrupt end; Obote sent a force, led by his army commander Idi Amin, to attack Mutesa's palace. Mutesa fled into exile in Britain. Obote immediately introduced a new constitution. This constitution abolished the four traditional kingdoms, ended the nation's federal structure, and provided for an executive president – a post he filled, in addition to his role as prime minister. With the help of the army and police, he terrorized any remaining political opponents. In an attempt to win support, Obote published the 'Common Man's Charter' with the aim of increasing the government's share of foreign-owned companies, especially those operated by Indians who flourished as a business class under colonialism (Ofcansky, 1996).

In 1971, Obote was overthrown by his General Idi Amin who made good use of widespread popular discontent. Obote fled to Tanzania, where he formed an army in exile to fight against the Amin government. Similar to the Khmer Rouge in Cambodia, people in Uganda in general, and those in Bugandan and Busoga (two big traditional kingdoms that were abolished by Obote) in particular, welcomed the coup d'état since they feared the spread of socialism as Obote was turning to the left because of his 'Common Man's Charter' policy. People in Uganda hoped that it would help to unify the country that was torn apart by ethnic divisions. To win more popular support, in 1972 Amin ordered all Indians to leave the country. His measure was welcomed since Ugandans believed they were exploited by middle and upper-middle class Indians (Mamdani, 1978).

However, only a small number of wealthy Ugandans, mostly government officials and military officers, benefited from the seizure of assets from Indians. The country's economy was severely disrupted and damaged since these officers did not know how to run a business. In turn, economic decline and discontent stirred up criticism, and the government experienced several serious coup attempts. Amin promised that his

government was just a 'caretaker' administration and would transfer power to a civilian government through democratic elections within five years. His government encountered problems; he often used military force and violence to maintain power. His obsessions resulted in the persecution of tribes other than his own. During his rule between 1971-1979, between 100,000 and 500,000 Ugandans were reported to have been murdered.

In 1978, Amin invaded Tanzania to pursue Obote's army, a move that triggered Tanzania, in collaboration with Obote's forces, to invade Uganda in April 1979. During the following twelve months two interim governments were led by returning Ugandan exiles. But in May 1980, a Ugandan general, Tito Okello, organized a coup that brought Obote back into power. He was confirmed as president six months after his UPC party's victory in an election generally believed to be fraudulent. Worse than his previous government during the 1980s, Obote used violent means to once again impose his rule, while the country continued to suffer economic chaos and tribal massacres carried out by various armed factions. It is estimated that under Obote's leadership more than 300,000 people died from political violence between 1981-1985.

Yuweri Museveni, who had played a critical role in the military overthrow of Amin, did not accept the UPC victory and formed a guerilla group against the Obote government. Museveni was supported by the Bugandans who had lost trust in Obote since the 1966 conflict. Finally, the Museveni group found its way into Kampala in 1986. Immediately after seizing control of Uganda, Museveni announced a policy of moral and economic reconstruction. It is important to note that it was not until a decade later that the first presidential election was organized, and it was not until 2006 that a multi-political party system was reintroduced.

It should also be noted that after the end of the civil war in 1986 in Uganda and 1993 in Cambodia, both countries had one leader, President Yoweri Museveni in Uganda and Prime Minister Hun Sen in Cambodia (in fact, Hun Sen had been serving in that position since 1985), who have remained in power to the present, strongly supported by the donor community attempting to rebuild and develop the countries after many years of political and economic turmoil.

II.2.2 Educational development since colonialism

Traditionally, the Cambodian system of learning had practiced in the wat (pagoda) under the guidance of Buddhist monks. Students, mostly boys, learned how to read and write Khmer (the Cambodian language) and practical skills such as construction, crafts, and traditional medicine. In Uganda, learning also took place in local communities, but, unlike Cambodia, knowledge was passed down from one generation to the next through hands-on learning without formal/informal education institutions or written script. This kind of education changed with the arrival of Christian missionaries[9] who taught the indigenous people how to read and write. Later, they taught arithmetic, agricultural, and technical skills (Ssekamwa, 1997; Ssekamwa and Lugumba, 2000; Walker, 1917).

Because of these different traditions of learning, modern formal education in Cambodia and Uganda, which were introduced by the French and British protectorates at the end of 19th century, took on different patterns. Initially, the British protectorate easily introduced its education system in Uganda because there were no formal/informal institutes of learning and no written script, thus they accepted what the British had to offer. On the other hand, the French protectorate faced difficulty in introducing its education system as the Cambodian people continued to send their children to traditional wat schools. In response to this situation, the French protectorate introduced a new policy meant to modernize the wat school. The hybrid school — a combination of traditional and French education — was established with the aim of preparing children to enter French schools at higher levels of education and thereafter to serve the French colonial administration (Clayton, 1998; 2000).

Although this process contributed to increased enrollment and a higher number of wat schools as compared to Uganda, the Cambodian modern formal education system developed at a considerably slower pace. Uganda had a type of high schools long

[9] There were three different religious groups, Arab Muslim, British Protestants, and French Roman Catholics. Although Islam preceded the introduction of Christianity in the late 1870s, Koranic schools were not immediately set up nor were they widespread, as was the case with the Protestants and Catholics (Tomaševski, 2000).

before Cambodia did, for example, Mengo High School (1903), Gayaza High School (1905) and several others. By the time of independence in 1962, Uganda had about 400 secondary schools. The first high school in Cambodia was not established until 1935 when the Collège Sisowath was given full Lycée status, and by the time of independence in 1953 there were only eight secondary schools.

Before independence, there was no institute of higher education in Cambodia, while Ugandan higher institutes of learning existed even during colonial times. Makerere College, established in 1922, expanded over the years to become a Center for Higher Education in East Africa in 1935. In 1937, the college transformed into an institution of higher education, offering post-high school certificate courses, and in 1949 it became affiliated with the University College of London. The reason underlying the faster advancement of secondary and higher education in Uganda than Cambodia was that the British used Uganda as a center for training civil servants and skilled labourers for its East African colonial purposes, while the French colonial administration did not choose Cambodia. Instead it chose Vietnam as a center for higher education to train civil servants and skilled labourers needed for its Indochina colonial project. By 1939 only four Cambodians (in a population estimated at slightly over 3 million) had graduated from the senior high school that had been established in 1935. Others in search of higher education were usually sent to high schools in Hanoi or Saigon (Smith, 1964).

Although the educational situation in Uganda at the time of independence was better than Cambodia, still there was an enormous task ahead for both countries to develop their education systems as they needed more educated people to develop their countries. First, many educated people were needed to replace the British and French staffs when they pulled out of the countries at the time of independence. Second, the government of both countries needed to make education and training relevant to the needs of the local labour market and economy and finally to expand the education system as the majority of people, especially in rural areas, did not have access to education.

In Cambodia, education was expanded rapidly during the Sangkum Reastr Niyum 1955-1970 led by King Norodom Sihanouk. Sihanouk rightly understood that a country's economic development required good educational institutions. He also considered himself Cambodian's father of education. From 1955 to 1968, the number of primary schools increased from 2731 to 5857, and secondary schools increased from 10 to 180 (Pellini, 2007). However, it was not until 1960 that the first Cambodian University was established, followed by several other universities and technical schools.

While Cambodia focused on expansion of primary and secondary education before it embarked on the expansion of higher education, Uganda focused on the expansion of post-primary education rather than primary education. For instance, between 1962 and 1964, primary schools aided by the government slightly declined from 2447 to 2422, while secondary schools substantially increased from 421 to 558. The argument for expansion of secondary education was to fully utilize the resources spent on tertiary education as there was a lack of candidates for the expanded number of tertiary institutions (Chesswas, 1966). In the early years following independence, the Ugandan government devoted a large proportion of its expenditures to the post-primary stages of education with the aim of producing graduates to meet the requirements of the development of the country after its independence (Oketch and Rolleston, 2007, pp. 13-14). However, the attempt to make education an engine of development did not yield any significant results either at the primary or the post-primary levels.

First, their curriculums in primary education were found to be irrelevant to the country's needs as they were still based on a colonial model and lacked practical subjects (Muyanda-Mutebi, 1996; Ayres, 2000a; 2000b). In Uganda, in 1964, the government took full control over the education system in order to minimize religious influence, denominational rivalry, and duplication of service. Despite this reform, Balihuta (1999) notes that the education system 'remained largely sophist in approach, British in content and elitist in accessibility' (p. 29). In Cambodia, since 1963, educational reform was introduced and more practical subjects were included in the curriculum in response to an outcry. However, there was a lack of teaching materials

and other facilities to implement the policy so, therefore it failed to produce significant change.

Second, although the development of post-primary education helped to produce a greater number of graduates to assume economic, political, and technical posts, many of which had been held by the French and British, it did not produce graduates suitable for the improvement of their economies. Despite the fact that both countries were dominantly agricultural and majority of the population lived in rural areas, educational policy and practice were aimed at preparing a workforce for modern sectors in urban areas.

In Cambodia, in 1963, new and more practical subjects were introduced in tertiary faculties. However, students continued to study liberal arts and humanities, which could only be applied in the modern sector, especially in government offices. The available jobs in this modern sector could not respond to the ever-growing number of graduates from the tertiary education (Ayres, 2000b, pp. 51-55). This was compounded by the fact that 'upon leaving the Lycee or technical school, the young men prefer to remain in Phnom Penh, waiting to be called for a civil service job or lucrative position with one of the foreign aid missions, rather than go to the provinces where their skills are in demand' (Smith, 1964, p. 659).

In Uganda, courses in post-primary education were not suitable for local economic conditions. As in the case of Cambodia, students preferred to study liberal arts rather than practical skills. In addition, there are at least two other technical reasons. First, the Ugandan education system depends on expatriate staff, as shown in Table 2.1. At the time of independence, among the total graduate teachers (teachers with degrees) of 636, expatriate teachers accounted for 95 percent, while local teachers accounted for only 5 percent. Although the ratio decreased by 1963, it was not substantial. Expatriate teachers still account for 87 percent. Second, courses are tied to the Cambridge University Overseas School Certificate, which makes it difficult to reflect the local situation (Williams, 1966). Chesswas (1966) notes that 'although considerable modifications have been made to meet Uganda's special requirements, there remains much in the curriculum, even techincal qualification, that is more

relevant to industrial urban British than to Uganda at its present stage of development' (p. 69).

Table 2.1 Number of local and expatriate teachers in Uganda

Graduate teachers			Teachers with complete secondary education	
Year	Expatriate	Local	Expatriate	Local
1962	604	32	683	970
1963	515	75	177	1424

Source: Williams, 1966

Since the late 1960s, political instability and civil wars in both countries allowed no time or resources to reform the education system. In the 1980s, attempts to restore the educational systems in Cambodia and Uganda faced extreme difficulties, not only because both countries had experienced on-going civil wars that sucked the limited resources from social development such as education, but they also lacked the human resources to effectively design and implement the reform, especially in the case of Cambodia. A report by the Cambodian Ministry of Education indicated that by 1979 there were no more than 300 qualified persons from all disciplines left in the country and most of the educational materials and facilities had been destroyed[10] (Clayton, 1998; Duggan, 1996).

When Yoweri Museveni's government in Uganda and the first coalition government of Cambodia led by CPP and FUNCIPEC assumed power in 1986 and 1993 respectively, they inherited difficult situations. While the illiteracy rate among the population was very high, much of the educational infrastructure was under-developed. In the case of Cambodia, the whole education system had to be changed as it was no longer relevant, moving from socialist-communist ideology and planned economy to a liberal democratic ideology and a market economy. In this sense, there was an urgent need not only to produce human resources for the immediate task of

[10] In Cambodia, I remember that during 1980s, educational materials were sold in the street for use as paper to wrap goods. There is a similar report in the case of Uganda after the end of its civil war (Sicherman, 2005). This was compounded by the brain drain movement in 1980s as many educated people left the country as a consequence of civil war and insecurity.

rehabilitation and reconstruction, but also to make education and training responsive to the needs of the local labour market for rapid and sustained economic development. Therefore, the task of rehabilitating, reconstructing and developing the education system was enormous for both governments.

Within this context, in Uganda, the Education Policy Review Commission was established in 1987 to review educational policy and the general situation. The commission suggested a blueprint for future directions in its 1989 report, which focused on universalizing primary education and recommended the gradual abolition of school fees and reform of other sub-sectors in the medium and long term. The overall goal was to establish a national education for national development. However, nothing changed in terms of policy and intervention as far as the budget allocation was concerned. This is due not only to the devastated economy in a country that had just emerged from civil war but also to the lack of priority given to the education sector by both the government and donors, as their rehabilitation and recovery programme focused on economic activity and macro-economic stabilization. Later, influenced by the International Conference on Education for All (EFA), held in Jomtien, Thailand, in 1990, which set a deadline for achieving Universal Primary Education (UPE) by the year 2000, the Ugandan government appointed another committee to review the 1989 report, which led to the adaptation of the 1992 Education White Paper (EWP). However, the 1992 EWP, with minor changes from the 1989 report, focused on providing opportunities for all Ugandan children and building the manpower needed for the development of the country. The 1992 EWP served as the backbone of subsequent educational investment plans.

In Cambodia, there is no recognized policy instrument like the White Paper in Uganda. It was left to the Ministry of Education, Youth and Sport (MoEYS) to set the policy and seek approval from the Council of Ministers. In early 1990s, a series of national education conferences was organized by MoEYS with the participation of both local practitioners and expatriates working for various donor agencies led by the Asian Development Bank (ADB) to identify issues facing the education system and to provide recommendations for future intervention. However, as in the case of Uganda,

EFA issues raised in 1990 at an international conference on EFA dominated the theme.

The 1992 EWP in Uganda and a series of national conferences in Cambodia in the early 1990s brought to life the first education investment plans in both countries (1992-03 and1996-97 for Uganda and 1995-2000 for Cambodia). The plans share similar overall objectives. The first objective was to provide education for all children. The second objective was to link training and education to the needs of the labour market and economy in order to foster economic development. The plans also aimed at achieving equitable access to and quality improvement of education. These overall objectives have never changed, and in fact this is what a country needs in order to produce the human capital necessary for development. The question then is how both governments mobilized resources to finance their education expansions and reforms. What are the policy priorities, as reflected through resource allocation, given to each sub-sector of education in order to respond to the needs of the local labour market and the economy, as discussed in the theoretical framework in Chapter I.

II.3 Financing the education sector after the end of civil war

The level and consistency of public spending on education are the first priorities in policy intervention to bring about the success of educational expansion and reform. However, education outcomes still depend on implementation. From data available immediately after the end of the civil wars, the levels of public spending on the education sector in Cambodia and Uganda were similar at around 10 percent of the total government public expenditure, as seen in Table 2.2. These levels were very low compared to other countries in similar situations. The difference is even sharper compared to East Asian countries, which before the enactment of their economic development invested at least 15 percent of their government expenditures on education, and later stages reached more than 20 percent (Hirosato and Kitamura, 2009b).

Table 2.2 % share of education out of government public expenditures in Cambodia and Uganda during the 1990s

Cambodia	1994	1995	1996	1997	-	-	-
	10.9	11.3	11.2	10.1	-	-	-
Uganda	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
	8.4	8.0	2.3	6.4	5.8	12	11.5

Source: Ear, 1997; SAPRIN, 2002

In Uganda since the late 1990s and in Cambodia since 2000, the situation has changed. The available data show substantial increases in public expenditures on education. By 2006, in Cambodia and Uganda, the share of spending on education out of their total public expenditures reached nearly 20 percent, as seen in Table 2.3. The spending on education in the two countries is comparable with other countries and can be considered generous given the low levels of local revenues and enormous tasks of reconstructing and developing other economic and social infrastructures. Both countries also created a special fund — in Uganda, 'Poverty Action Fund' through debt cancellation and in Cambodia, 'Priority Action Program' recently renamed 'Program Budget' (PAP/BP) — to protect the education sector from budget cuts (Williamson, 2003; Dom et al., 2003).

Table 2.3 % share of education out of government public expenditures in Cambodia and Uganda during the 2000s

Cambodia		2000	2001	2002	2003	2004	2005	2006
		16.22	14.77	18.47	17.09	18.67	17.82	19.23
Uganda	1999-00	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	26	20.06	18.8	18.8	17.1	17.6	17.8	15.4

Source: ADB, 2009; MoFPED, 2009a; SAPRIN, 2002

It is important to note that since 2000, while Cambodia could continue increasing the level of public spending on education, Uganda could not. Uganda experienced a steady decline of the share of its education budget in total government expenditures

from its peak of 26 percent in 1999-2000 to 15.4 percent in 2008-09. Further, recent budget allocations indicated a further decline of spending on education to 14.9 percent in 2011-12 (MoFPED, 2009a). In contrast, Cambodia's share of the education budget of total government expenditures increased steadily, albeit in small increments, from 16 percent in 2000 to 19 percent in 2006. Further, recent resource allocations to the education sector increased to 20.85 percent of total government expenditures in 2010 (MoEYS, 2005).

The questions then are why were both countries able to increase public spending on education and why is Cambodia able to maintain the increased support while Uganda cannot? Resource mobilization faced several challenges, such as the limited availability of local resources and overall policy reform in the allocation of financial resources for the public sectors supported by the donor community; both countries depended on external sources to finance their reforms, while overcoming the impact of their historical circumstance. Further, the greatest challenge is the competition for scarce resources from other sectors influenced by political elites. The following section will analyse how these factors and actors influence resource allocations to the education sectors in Cambodia and Uganda.

As both countries emerged from civil wars, few local resources were available for financing public investment and expenditure during the 1990s. Therefore, much of the financing came from donors. Although, both Cambodia's and Uganda's education reforms received substantial support from donors, donor support in both countries differed substantially. During the period of low public spending on education in Uganda between 1991-1997, Official Development Assistance (ODA) to education accounted for only 6 percent of the total ODA, while in Cambodia between 1994-2000, ODA to education accounted for about 9 percent of the total ODA. Later, although donors in both countries increased their support to education, in Cambodia donors' commitment to finance education continued to be higher than in Uganda. While the ODA to the education sector in Uganda increased from around 6 percent in the early 1990s to nearly 10 percent of the total ODA between 1997-2000 in Cambodia, it increased from around 9 percent to over 10 percent during the 2000s (Berry et al., 2003; CDC, 2008). Further, in Uganda the donor community meeting in

2010-2011 decided to cut the budget support to the education sector by almost Ush 65 billion (Talemwa, 2010a).

In absolute terms, aid flow to the Cambodian education sector is also much higher than Uganda, despite the fact that the overall amount of aid flow to Uganda is substantially higher than to Cambodia (as presented in Chapter VI). In total, from 1994 to 2006, donor assistance to the education sector in Cambodia amounted to almost US$700 million, while the total amount of donor assistance to the education sector in Uganda from 1991-92 to 2005-06, a period two years longer than in Cambodia, was only US$530 million (CDC, 2008; Bategeka et al., 2004).[11]

Why are donor commitments to Cambodia and Uganda different? In fact, the decision to invest in public service provisions by donors depends on the commitment of their involvement with and the historical circumstances of the recipient countries. During Uganda's rehabilitation period, donors neglected the education sector. This may have been influenced by two factors. The first is the introduction of the Structure Adjustment Programme (SAP). In Sub-Saharan Africa (SSA) as a whole and in Uganda in particular, Lewin (1993) notes that SAP and increasing debt also influenced how public expenditures such as education are allocated. SAP was introduced by the International Monetary Fund (IMF) and the World Bank, which were concerned more about macro-economic stability and aggregate economic growth and reducing the role of the state in service provision. As Irumba (1995) writes, '… SAP … aimed at improving the productive sectors, caused public concern about its negative effects on education. … People protested that under SAP, government regarded education as a non-priority sector' (p. 3). This is not new. For example, between 1981-1984, the first loan package to Uganda by the IMF and the World Bank came with recommendations to reduce government spending on social services such as education so that money would be invested in economically productive projects (Kalisa, 2006). Other scholars even strongly argued that the inability to move up the ladder of development in Africa in general and in SSA in particular is a restriction on public investment in education, which is a result of the SAPs (Carnoy, 1995).

[11] Retrieved October 10, 2008, from http://www.MOEYS.gov.kh/de_partner_profile/dev_partner_pro.htm

The second factor stems from Ugandan historical development of the education sector. Despite the civil war, enrollment at all levels of education was improving, albeit slowly (Balihuta, 2005), therefore, such an increase caused no concern to donors. On the contrary, donors in Cambodia, led by the World Bank, although giving priority to agriculture and infrastructure in order to foster economic growth, gave equal priority to the education sector investment. Its policies and programmes for the recovery period suggest that 'the dramatically low level of basic education in Cambodia deserves full and immediate attention' (World Bank [Cambodia], 1994, p. iii).

Staff from multilateral donor agencies who used to work in both Cambodia and Uganda claim that presently there are no serious donors in Uganda, while there are in Cambodia (interview, 14 May 2009). Her opinion holds true if we analyse the nature of donor involvement in both countries. A number of studies on aid distribution revealed that donor interest and political and strategic considerations, rather than the recipient country's interest and needs, were the key determinants of aid flows. Aid flow to Uganda lies within this context, as the country is situated in an unstable and unsecured region. Despite donors' rhetoric on the promotion of democracy, good governance, and sectoral reform, which includes public service provision, aid to Uganda has not been threatened during times of bad governance (Alesina and Dollar, 1998; Andersen et al., 2006; Piron and Norton, 2004; Sadie, 2002). Donors often overlooked the Ugandan government's absence of commitment to this reform. This is mainly because, as John-Jean Barya (2001) claims, 'Many Western governments look at the NRM/Movement regime as a useful one for their own geopolitical, ideological and economic interests in the region' (pp. 223-224). On the other hand, aid to Cambodia is a result of international commitment to end a civil war stirred by world political ideologies during the Cold War – between socialist-communist and liberal ideology – which reconstructed Cambodia under the 1991 Paris Peace Agreement with the support of United Nations. Therefore, the international community committed itself to the projects.

However, it is the local political context that plays a more critical role in influencing such decisions, rather than external factors. This is reflected in the fact that public

spending on education, before it could increase, was not only low, but also fluctuated. This was due to the lack of a medium-term budget framework for resource allocation in both countries. Therefore, budget allocation to each sector depended on the annual bargaining power of each ministry. This bargaining power actually derives from the interest of top government leaders, especially to maintain their power. In Uganda during this period, Stasavage (2005) writes, 'On some occasions Museveni was actually disparaging about suggestions that more public resources should be shifted to education, referring to education as the "non-productive" sector of the economy' (p. 59).

Hughes and Conway (2004, p. 39) argue that policy-making in the context of keeping a network-oriented political system in power makes any systematic reform extremely difficult if not impossible. Any calculation for reform has to take into account not only how it will improve the overall development of a nation, but also how it can support the leaders to maintain their power. Within this context, reform does not happen across the board, but only in selected areas. Usually, in the context of on-going insecurity and the threat from insurgents (in Uganda from Lord's Resistance Army, and in Cambodia from the Khmer Rouge), social services such as education were among the first victims of reductions as the governments concentrated on the military, not only to maintain security, but also to sustain their power. Consequently, available statistics indicate that in the early 1990s, Cambodian defense accounted about 50 percent[12] and Ugandan security alone accounted for more than 20 percent of the total government expenditure (ADB, 2009; IMF, 1999). These expenditures on defense and security by both governments are far higher than their expenditures on education.

In the late 1990s, the change in external factors — overall public budget management reform and improvement in security and the demobilization programme — led to reductions of defense and security budgets, which provided more resources for social

[12] It is important to note that high spending on defense in Cambodia is not only due to security issues, but most importantly due to the integration of military forces from different warring parties into a national military force after the general election in 1993, which led to a very high numbers of military personnel.

services, including the education sector, as seen in Table 2.3. In Cambodia, since 1993 government expenditures on education, health, rural development and agriculture combined just exceeded expenditures on defense for the first time in 2002. At the same time, the 'Medium Term Budget Framework' reform was introduced by the donor community, which outlines the available resources to the sector and guarantees a minimum level of funding to enable the Ministry of Education to plan effectively in the medium term.

Cambodia and Uganda went through similar situations as described above, which enabled them to increase their public expenditures for their education sectors, but why was Cambodia able to maintain the increase, while Uganda was not? Once again, it was the local political context that influenced this. In contrast to the early 1990s when Cambodia and Uganda shared similar political development patterns in which maintaining security was the key for regime legitimacy, now the pattern of their political development differed substantially, leading to a different emphasis on investment in education by political elites.

Answering the question why Cambodia is able to sustain the increase of budget for the education sector while Uganda is not, we need to look into the reasons and sources behind the budget increases in both countries. It is important to note that in Uganda the source for increases of the public expenditure on education were due to the introduction of general budget support in which funds were pooled from donors funding various projects. This project support was believed to have been not only fragmented in terms of intervention, but also did not respond to local priority needs, as donors always set the agenda for intervention. Therefore, general budget support was adopted to support the recipient country's priority development plan. During the 1990s, the share of general budget support of the total aid was around 30 percent and increased to 50 percent by 2003. Between 1997-98 and 2003-04, general budget support contributed 31 percent of the real-term increase in public expenditure (Williamson, 2006). Donor objectives to promote political stability in Uganda, as discussed earlier, coupled with general budget support to provide the opportunity for Ugandan political elites to influence decisions over the investment in education as donors did not have strings attached to their support.

The budget increase to the education sector in Uganda in the late 1990s and early 2000s was due to the implementation of Museveni's promise to provide UPE during the presidential election in 1996, an issue discussed in the next section. The mobilization of funding needed to implement the education policy was possible, Avenstrup (2006) argues, not so much about the Medium Budget Reform, but 'only because of top political backing that empowered the ministry of education and other ministries to adjust their budget to meet the needed expenditure' (p. 234).

Since 2001, Williamson (2006, p. 147) has noted that in Uganda there is an increase of political involvement in the public finance system. Despite budget increases to the education sector since 1996, President's Museveni's electoral support has decreased steadily in the last two presidential elections. Consequently, the Ministry of Education and Sport (MoES) receives less attention from President Museveni because it is considered politically insignificant to the power game of Ugandan politics. In recent years, the heavy emphasis on education sector reform as a strategy to win presidential elections was dropped, and President Museveni began to use a new political tactic of 'divide and rule'. This is reflected in the increases of its administrative unit — district — from less than 40 when President Museveni first came to power to 80 in 2008 and reaching 112 in 2010 (Semakula, 2010). The tactic of divide and rule is possible in the Ugandan context as the country consists of diverse ethnic groups (more than 10), which historically have harbored animosity towards each other. Using both quantitative and qualitative analysis, Green (2010) argues that district creation has functioned as a source of patronage. He further points out that these newly created districts served as a means to compensate for other patronage resources lost through public administrative reforms and that they have helped him to continue to win elections (Green, 2010).

Williamson (2006) also noted that action by donors in an attempt to control public expenditures, such as State House spending, has had little effect. Another study reveals that although the general budget support offers donors opportunities for engagement with the government of Uganda on a wide range of governance issues, it cannot buy governance reforms that threaten key political interests (Lister et al., 2006). Consequently, this leads to an increase in State House spending and the general

public administration spending from 17.5 percent in 2002-03 to 24.9 percent in 2005-06 of total government spending. This increase negatively affects government expenditure on other public sectors such as education.

Unlike Uganda where increased/decreased spending on education is motivated purely by political reasons, in Cambodia the reasons for increased educational spending resulted from MoEYS's open recognition of the need for radical reform to improve the sector performance after a 1999 assessment of the education sector showed poor results (Forsberg and Ratcliffe, 2003). As discussed earlier, donors in Cambodia are more committed to sectoral reform such as education than Uganda; consequently, donors put pressure on the government to increase social services such as education through World Bank Structural Adjustment Credit (Ratcliffe et al., 2009).

Although to some extent donors also tolerated the Cambodian government's unwillingness to initiate reform in some sectors like judiciary and anti-corruption units, donors in Cambodia are relatively more committed to sectoral reform such as education. Despite the push for global aid architecture to provide general budget support as in the case of Uganda, the majority of donors in Cambodia did not provide general budget support. Between 2006 and 2008, general budget support accounted for only about 6 percent of the total aid to Cambodia. Currently in Cambodia, over 90 percent of foreign aid bypasses the government public management system (CDC, 2008) and goes directly to both sector support and project support using the country's own financing systems. Among other reasons, a study by FTI (2009), as well as fieldwork interviews and personal conversations with education project managers and advisors in Cambodia, indicated that donors lacked confidence in public management systems and the government's will and capacity to prioritize sectoral investment (interview, 10 September 2008; personal conversation, 18 August 2008).

However, the sustained increase in budget allocation to the education sector in Cambodia is motivated by political reasons. Unlike Uganda, political competition in Cambodia increasingly depends on performance, and there is no ethnic card to play to win the election as there is in the case of Uganda, because Cambodia consists of one majority ethnic group — Khmer —that is well integrated among a few small minority

groups. Prime Minister Hun Sen's popular support has increased steadily since the 1998 general election, especially in rural areas. A survey by the International Republican Institute (IRI) indicated the CPP victory resulted from the improvement of social services such as education.[13] Therefore, Prime Minister Hun Sen not only gives priority to public expenditure on social services like education, but he also has been able to run a parallel budget for social service provision through the financial support of businessmen. Although exact statistics are not readily available, anecdotal evidence reveals that the availability of budget for social services such as education in Cambodia through the CPP and Prime Minister Hun Sen are substantial.

II.4 Policy priority and resource allocation

An examination of the total expenditures on the education sector and its overall objectives — to provide EFA and to link education and training to the needs of the labour market and economy — does not reveal the policy priorities and resource allocation to each sub-sector. This section will first analyse policy priorities as reflected in the strategic education investment plans and analyse whether the resource allocation reflects the policy priorities. Second, it will examine what the factors and actors are that influence decision making given the complexity of financing education in Cambodia and Uganda.

II.4.1 Basic/primary education[14]

As in the case of public budget allocation to the education sector, in Uganda, since the end of the civil war, prioritizing basic education in budget allocation has not been consistent despite the calls for universal primary education in all national education plans. In Uganda, financing basic education can be classified into four different periods. There was low expenditure between 1986-1996, a huge increase between 1997- 98 and 2001-02, which flattened out between 2001-02 and 2006-07, and the

[13] Retrieved 23 March 2010, from, http://www.iri.org/news-events-press-center/news/phnom-penh-post-features-iri-cambodia-poll

[14] It is important to note that while Cambodia clearly defines nine years of schooling, 6 years in primary plus 3 years in lower secondary school, as basic education as in many other developed countries, Uganda does not. In Uganda's stated objectives of universal primary education, 7 years of primary education is considered basic education.

expenditures have declined in real terms below the level of 2001-02 since 2008-09, while basic education in Cambodia remained the single priority for the government.

In Uganda, immediately after the end of the civil war, budget allocation to primary education was very low, accounting for only 30 percent of the total public spending in the education sector between the late 1980s and mid-1990s. Uganda's first education investment plan in 1992-93 to 1996-97 also did not give priority to primary education in terms of resource allocation. By the mid-1990s, although there was an increase of budget allocation to primary education, its share never reached over 50 percent of the total public expenditure on education, despite a government commission report in 1989 and the 1992 EWP calling for universal primary education (Mehrotra and Delamonica, 1998).

As discussed earlier, education investment during this period was not the government's priority. At the same time, the donor community, although supporting the idea of education for all, had no plan to push for rapid expansion of an education provision through free public education; therefore, they did not pressure the government to increase budgetary support of primary education. According to Stasavage (2005, pp. 68-69), there is no evidence that the World Bank or other donors were advocating the immediate abolition of school fees. A World Bank report from this period noted that the issue of user charges in education was currently under discussion, and that decisions about education costs might best be decided at the local level. In fact, much of the donors' intervention on behalf of primary education focused more on quality improvement — in the name of software reform such as teacher training programmes and textbook provision — rather than on the expansion of access. This pattern of resource allocation and intervention did not reflect the priorities of Uganda at that time when many of the school-age population were not in school, nor did it reflect the global commitment to achieve EFA. Because of high poverty rates during this period, most families could not afford school fees for their children; consequently, gross enrollment rates in primary education stagnated at roughly just over 50 percent.

During the presidential campaign in 1996, Museveni promised to promote UPE by abolishing school fees, which he implemented in 1997. As a result, primary education's share of the total Ugandan government expenditure on education increased from 30 percent in 1989-90 to more than 60 percent in the late 1990s and early 2000s. In this sense, Uganda's move toward UPE was not under pressure from donors, but was motivated by the first direct presidential election since National Resistance Movement (NRM) came to power in 1986. Oketch and Rolleston (2007) write, 'It appears that free primary education emerged from the transition to democratic politics. Political demand rather than rational planning seemingly triggered UPE in Uganda' (pp. 13-14).

Immediately after the implementation of UPE, school enrollment skyrocketed from roughly 2 million in 1996 to about 6 million in 1997, and to over 7 million in early 2000s. The World Bank (2004a, p. ix) noted that the increase in enrollment in Uganda was threatening the entire education system. Unless additional resources could be made available, the system would collapse. To save the system, the World Bank quickly introduced the Education Sector Adjustment Credit in 1998, combined with International Development Assistance credit that amounted to US$80 million. Later, another US$75 million was provided to Uganda to support the education reform through a Highly Indebted Poor Country grant. This ad hoc arrangement was necessary because Uganda was considered by donors to be a success story of macroeconomic reform during the 1990s and a model for Sub-Saharan Africa for the success of neoliberal economic principles. In this sense, donors' support to primary education in Uganda followed rather than preceded the reform.

It is important to note that much of Uganda's budget support to primary education came from donors under the new aid architecture. In the late 1990s, a review of the effectiveness of donors' project support led to the introduction of a sector-wide approach (SWAp). In fact, Uganda is the first country to adopt SWAp and continues to serve as a model in achieving UPE between the late 1990s and early 2000s, before its recent decline and deteriorating quality. Basically, SWAp attempts to encourage all donors to support a sector within a common management framework around a government priority programme in order to avoid different priorities of donors'

projects, as in the early 1990s. This change is characterized in official development assistance as a shift from donorship to ownership and partnership. Further, the introduction of general budget support, as discussed earlier, assists the MoES in meeting the recurrent costs of a greatly expanded system. Between 1998 and 2002, external assistance funded between 54 and 61 percent of the recurrent costs of basic education delivered through primary schools (Berry et al., 2003).
This raised a concern about the sustainability of the system as well as the priority of UPE that is heavily dependent on external support and especially Museveni's political motivation to win elections. In the early 2000s, the concern about the sustained priority of UPE in Uganda became a reality. There was a strong signal that the Ugandan government's emphasis on primary education was no longer a priority. For example, Uganda fell behind schedule in meeting the Millennium Development Goal (MDGs) of having all children in primary school by 2015. Although Uganda was, in 2002, selected among the first beneficiaries of the Fast Track Initiative (FTI)[15], later the Ugandan government rejected the donors' selection.

The reason for the rejection was that if Uganda accepted the donors' selection then the government would have to focus on primary education and could not redirect funds to other sectors or sub-sectors where the Ugandan government was used to funding pet interests when aid was provided through general budget and sector support. It is important to note that despite the introduction of UPE, the result of the presidential election in 2001 and 2006 revealed that President Museveni's votes declined and so he had to change his policy priorities in order to regain votes. Around mid-2000, there was a shift of policy emphasis from primary education to post-primary education. During the presidential election in 2006 and recently in 2011, Museveni introduced the Universal Post-Primary Education and Training (UPPET) to gain votes. This led to the revision of the education strategic investment plan (ESIP) 2004-2015. The current ESIP 2007-2014 includes a focus on UPPET. With the change of emphasis to UPPET in the midst of declining public expenditures in education, as discussed

[15] FTI is a global partnership between donors and developing countries to speed the progress towards the MDG of achieving UPE by 2015. All lower-income countries that show serious commitment to achieving universal primary education completion can receive support from FTI.

above, the initiative could possibly be implemented through the reallocation of budget from other sub-sectors within the education sector.

Consequently, there was a decline of budget allocation to primary education out of the total public expenditure on education from 72 percent in 2000 to 59.7 percent in 2006-07, and an increase of budget to post-primary education, mainly to secondary and higher education from 12.5 percent to 22.2 percent and 3.5 percent to 11.7 percent respectively, during the same period (Policy and Operations Evaluation Department, 2008). Actually, the budget for UPE in 2010 was only USh495.1 billion, while the budget for Universal Secondary Education (USE) was USh210 billion, about half the budget for UPE, which further reduced the share for primary education of the total education budget to 41 percent (Baguma, 2009; Talemwa, 2010a).

As a result, the government's subsidy to primary students remains very low compared to secondary and university students. Available data show that university students received 39 times more and secondary students 7 times more than primary students in 2002. This large discrepancy contrasts with successful countries in East Asia. For example, during this same period in Singapore and South Korea the difference between primary and secondary was less than two times. And the difference between primary and higher education in South Korea was less than three times. It is also important to note that the difference between each sub-sector of education was even smaller in Singapore and South Korea during their early stages of development (Goh and Gopinathan, 2008; Lee, 2008).

As usual, we observe that donors always follow a government's initiative of reform. Donor support for primary education in Uganda was not sustained. Aid commitments to basic education have been uneven with a general downward trend. The share of basic education in total aid to education has declined from 93 percent in 1999 to 58 percent in 2006 (Purcell, 2009) and increased for secondary and higher education.[16] As discussed earlier, the reason why the donor community in Uganda so easily ceased

[16] Recently, the donor community led by World Bank and African Development Bank provided loans to Uganda valued at US$150 million and US$78 million respectively to support UPPET (Lirri, 2009; Bugembe, 2009).

supporting primary education was that donor support for primary education followed rather than preceded the introduction of UPE. Further, donors in Uganda are always ready to adopt the global agenda, which currently focuses on support for secondary and higher education in developing countries.

The problem, it appears, was lack of independent research evidence to support policy reform to meet the country's needs. Kiiza et al. (2006) argue that, 'The evidence used is politically constructed and/or reflects the norms, values and ideologies of IFIs[17] … rather than Uganda's long term developmental goals' (p. 1). There are at least two reasons underlying this issue.

First, although Uganda established commissions to analyse the educational issues, their input is rather weak. Interviews and conversations with retired government officers who used to work in the education sector in Uganda reveal that the academicians who participated in the review commission and reform programme do not dare challenge the politicians (interview, July 28, 2009; personal conversation, July 27-31, 2009). Similar observations have been made by Ugandan scholars. Onyango-Obbo (1989) notes that those who set up the commissions proceeded

> to call up academics to serve on these commissions, and the qualification is almost always some connection to some big shot in government. This has one negative result for education. Academics who want to go on these commissions start courting the patronage of politicians and being subservient to governments or parties. As far as educational reform goes, these people either stop speaking out in support for the reforms, or some may even begin to oppose them. These are some of the ways in which what, on the face of it, looks like a simple failure to allocate resource to education, turns out to undermine other social and political institutions.

A similar observation is made by Irumba (1995, p. 20): top leaders in the ministry participating actively in every technical meeting is not a good sign, but a politicization

[17] IFIs refers to International Financial Institutions.

of education instilled fear among junior officials who either remained silent or spoke with caution, fearing to appear to disagree with top officials' views.

Second, there was a lack of input from NGOs in the policy process. In Uganda, the participation of civil society such as local NGOs and grassroots organizations was very limited. This limited participation from NGOs may also result from their involvement in the education sector. NGOs in Uganda tended to operate their own schools rather than support public schools. Therefore, the government did not see any significant contribution of NGOs to its public education system. Although they were often invited to the table in policy and planning discussions, they repeatedly expressed the feeling that their involvement in such discussions with government only occurred relatively late in the process. They felt that they were asked to consider decisions that had already been taken, for which their subsequent 'buy-in' was wanted. (Berry et al., 2003, p. 32)

A study by Namara (2010) also concludes that,

> … NGOs are used in the political coordination system whereby even NGOs that claim to work for the interest of the poor inevitably remain loyal to the techno-managerial control system … NGOs participation has been mainly a low-path of participation. The principal concern of policy makers (donors and government) is to retain social control. Therefore participation is pursued not because it benefits the people but because it provides potential for control. (p. 26)

This shift also encouraged the education policy makers to revitalize its historical bias against primary education. The education strategic plan developed by the Ministry of Education argues that, 'A critical problem facing Uganda is that it does not have enough men and women with competencies needed to achieve its development goals' (MoES, 2008a). At the same time, the Uganda Poverty Eradication Plan 2004-05 to 2007-08 argues that

> The planning of public expenditure … has to take into account the possibility that education would take place even without public intervention. For this reason, government will aim to focus its resources on those who would

> otherwise not access education, particularly secondary and tertiary education where universal access is not yet achievable. (MoFPED, 2004, p. 154)

A commissioner in the Ministry of Education echoes this by saying, 'Some people have misgivings about USE but if we do not come up to support it, other programmes will be undermined. Failure to have USE will mean that we shall be undermining UPE' (The New Vision, 2006).

This interpretation and calculation do not reflect the reality of local need. The reallocation of resources weighed down the unfinished project of achieving UPE, introduced in 1996, let alone quality improvement. This is because the demand for primary education remained high as there was no demographic change — the percentage of primary school-age children (6 -12 years) reduced slightly from 21.9 percent in 2002 to 20.42 percent in 2006.[18] The shift is also not consistent with the 1992 EWP, which argued that 'Only when every child is enrolled at the right age and does not leave school without completing the full cycle of primary education, would it be possible to ensure that all citizens have the basic education needed for living a full life, achieving a transformation of society and accelerating the economic growth'. The shift away from primary education in Uganda is also not consistent with its study of social and private rate of return, which shows that the investment in primary education yields the highest rate of return compared to the investment in secondary and higher level of education (Winkle and Sondergaard, 2008).

A Ugandan law maker, the chairperson of the Parliamentary Committee on Social Services, is also opposed to the shift as she rightly argues, 'It is no use concentrating on secondary education if students don't make it to that level. We want pupils to have a good foundation at primary school' (Butagira and Natabaalo, 2009). The shift away from prioritizing primary education in Uganda is the opposite the trend of the successful experience of Newly Industrial Countries (NICs) in East Asia. NICs only shifted priority towards secondary and tertiary education when basic education was fully achieved (Cumming, 2009). Harrold (1996) notes that 'the decisive factor in East

[18] Retrieved 14 January 2010, from http://www.childinfo.org/files/ESAR_Uganda.pdf

Asia's success was the allocation of public expenditure between basic and higher education. East Asia consistently allocated a higher share of public expenditure on education to basic education than elsewhere. The share of public funds allocated to tertiary education in East Asia has tended to be low' (pp. 48-49). This explains why NICs have diffused mass education rapidly compared to other developing countries after colonialism.

While Uganda cannot sustain prioritizing primary education, in Cambodia basic education has remained the single priority for investment since the early 1990s. Although Cambodia has a better chance than Uganda to shift its focus away from primary education as it experiences a demographic change — the percentage of primary school-age children (6-11 years) are among the total population reduced from 18.1 percent in 1998 to 14.62 in 2006 (Forsberg and Ratcliffe, 2003; MoP, 1998)[19] — Cambodia still focuses on basic education. All subsequent Cambodian investment plans, Education Strategic Plan (ESP) 2001-2005, ESP 2004-2008, Education Sector Support Program (ESSP) 2001-2006, ESSP 2004-2008, and the revised ESP 2006-2010 and ESSP 2006-2010, were all committed to achieve and consolidate the existing priority focus on basic education rather than introduce new priorities. Even Cambodia's long-term education investment plan 'Education For All 2003-2015: National Plan' remains focused on basic education.

Cambodia's Poverty Eradication Plan since the 2000s has consistently stressed basic education as a means to alleviate poverty, in contrast to Uganda, which stressed post-basic education as a means to alleviate poverty. Although Cambodia emphasizes the importance of expansion of post-basic education, they call for the development of sector-wide pro-poor financing strategies that provide scholarships for the needy and disadvantaged groups, rather than stressing the need for the government to provide universal access, as in the case of Uganda discussed above (SNEC, 2004, p. 84). In this sense, it appears that Cambodia does follow the NICs experiences of sustained focus on primary education. NICs experiences show that educational development is

not a sprint but an endurance race built partially on a strong foundation of primary education (Cumming, 2009, p. 70).

The share of basic education of total public expenditures on education in Cambodia has always been high, even higher than Uganda, especially since mid-2000s. In Cambodia, the share for primary education of public expenditure increased from 62 percent in 2004 to 76 percent in 2008 (see Table 2.5 for detail annual).

Table 2.4 The share of primary education in total government expenditures on education in Cambodia and Uganda

	2002-03	2003-04	2004-05	2005-06	2006-07
Uganda	66.9	68.4	66	67.1	59.7
	2004	2005	2006	2007	2008
Cambodia (recurrent only)	62	72	74	75	76

Source: MoEYS, 2004; 2005; Policy and Operations evaluation department, 2008

Further, unlike Uganda, Cambodia not only accepted but also expended a great effort to obtain FTI funds of US$57.40 million to expand and deepen its basic education system. In addition, about 113 organizations (NGOs) supported 233 education projects in Cambodia at an estimated cost of US$225 million in 2003–2008, mainly focused on basic education (Tan, 2007). Also unlike Uganda, where NGOs tend to run their own schools and therefore not contribute to the public education budget, the majority of Cambodian NGOs are working with public schools. Therefore, the Cambodian government can see additional benefits to its public education system by involving NGOs.

Further unlike Uganda, in Cambodia at the beginning of the country's rehabilitation, the donor community, especially ADB, worked closely with the government to support education reform, focusing on expanding coverage of basic educational provision. Consequently, donors continue to support basic education amidst the global trend towards secondary and higher education. The ADB approach to education 'should evolve to lending within a policy framework over a sustained period … should

be planned within a broader sector policy context based on sector analysis, and conceived as part of a long-term strategies' (ADB, 2002, p. 29). This long term strategy not only comes from sectoral analysis of the demand side, but also from exchange of regional experiences in key aspects of educational development policy, reform, and good practices in which the consolidation of basic education is the priority. Between 2001-2007, five big donors — ADB, JICA, WB, EC, and UNICEF — which accounted for more than 70 percent of the total donor fund to the education sector, all placed their priorities on basic education.

Although planning and key government policy papers in Cambodia are, to a certain extent, donor-driven and are largely prepared by donors (McNamara, 1999; Maeda, 2007), Ayres (1999) claims they are formulated with regard for principles of modern government and institutional arrangement. The level of domination by donors has declined over time. Not only does the specialized ministry take an active role, but input is given by the people represented through NGOs. These NGOs are working on the ground, which reflects the reality of Cambodian education. Hughes and Conway (2004) noticed that the consultative Group Meeting, recently renamed Cambodia Development Cooperation Forum, since 1990s has been the forum for debating policy that involves not only donors and the Cambodian government but also NGOs. This is a form of policy-oriented discussion. They also noted that the NGOs represented there are the largest and most professional.

McCargo (2010) also notes that Cambodian NGOs working on social issues such as education enjoy greater freedom and ability to influence government policy through their membership in the Education Technical Working Group. Relations between the CPP and NGOs — both local and international — are improving (Brazier, 2009) for at least two reasons. First, the government led by CPP is more confident since it consolidated its power and so feels less vulnerable to criticism by NGOs. Second, NGOs enhance the government's performance and thus its legitimacy by providing the government with feedback as well as expertise. On the other hand, NGOs in Uganda have less influence on government policy. This is because in Uganda there is no such forum and NGOs are not members of the Education Technical Working Group. Policy

is greatly influenced by either political elites or donors as they negotiate privately (Williamson, 2008).

The sustained technical support from donors and NGOs also helped to improve the staff capacity of MoEYS in Cambodia. Several donor representatives reported positively that they increasingly consult with MoEYS officials over their development assistance plans. Another example of increased government capacity has to do with how documents are drafted. In the past, a number of official documents of MoEYS were reportedly drafted in English, first with significant assistance by foreign advisors, then translated into Khmer. However, both government officials and donor representatives stated that the recent drafting of the National Plan EFA 2003-2015 was conducted primarily by government officials with limited assistance from foreign advisors (Government-Donor Partnership Working Group [Sub-Working Group No. 3], 2004).

These decisions, however, might not have materialized if not for political support. As discussed earlier, CPP's victory in recent elections was made possible by support in rural areas. This situation forces the CPP to focus on rural development. In rural Cambodia, as discussed in Chapter III, people have just gained access to education for their children and many still lack it because of constraints on the supply side. This condition, therefore, gives incentive to the CPP to improve rural education. In this sense, it appears that the ruling party CPP offers opportunities for meaningful participation by NGOs and donors in the education sector because their work helps to strengthen its legitimacy (Un, 2006).

II.4.2 Technical and vocational education and training (TVET) and higher education

Uganda's lower emphasis on primary education than Cambodia's during the early 1990s means that it had more resources allocated to post-primary education. However, Uganda has not been able to give priority to BTVET[20] over higher education. During

[20] In the case of Uganda, TVET encompasses business education and training, thus 'B' is added to the abbreviation BTVET. However, for convenience in comparison with Cambodia that uses only TVET, the 'B' was dropped in this study.

this period, the priority pattern of resource allocation to each sub-sector of education followed the pre-war period, which put more emphasis on secondary and higher education over primary education and TVET. For example, Makerere University alone accounted for 78.25 percent of budget allocated to post-secondary education (Eisenmon et al., 1993). Consequently, between 1989-92, in real terms, the government spent only USh1,900 per primary pupil while it spent USh 430,000 per Makerere student or almost 225 times higher than primary pupils (MoES, 1992). Uganda has spent more on higher education since colonial times because the cost of educating university students has been totally borne by the government, including student living expenses. Although during this period there was discussion about cost-sharing and privatization of higher education under the structural adjustment and economic recovery programmes, the government took only modest steps towards this reform.

In fact, reform in higher education was a very difficult task. For example, there was an attempt to rearrange students' scholarships at the university in order to pass on the high cost to the government. Unfortunately, this attempt was met with some resistance because political forces hesitated to permit the government to do so, especially in the case where university students were familiar with this long legacy of sponsorships, as in the case of Uganda. ADB (2001) noticed that these groups were coming from the politically well-connected and wealthy families and were therefore willing to be vocal. For instance, Makerere University was closed during two separate periods (1989–1990 and 1990–1991) as a consequence of student demonstrations aimed at challenging the government's withdrawal of transportation allowances and the introduction of a book bank to save on book costs (Sicherman, 2005).

Consequently, despite the push to cut the spending on higher education, the government decided to keep its funding high in order to prevent possible political instability emerging from protests by university students.[21] Until the late 1990s, the share of higher education accounted for nearly 20 percent of the total government

[21] During my fieldwork in Uganda, protests and strikes among secondary and university students were frequently staged, which affected the quality of teaching and learning, while such protests and strikes are nearly absent in Cambodia.

spending on education, with some years reaching 28 percent (Court, 1999). However, it is important to note that because of the political commitment to provide universal primary education introduced in the late 1990s, as discussed earlier, there was a dramatic decline of budget allocated to higher education, to its lowest point of 3.5 percent in 2003. The decline of government support for higher education in turn led to higher education reforms; fee-paying classes in public universities were introduced and private higher education institutions grew rapidly to respond to the demand for higher education.

In Uganda, the declining priority on higher education in the late 1990s became an opportunity to strengthen TVET. Ugandan ESIP 1998-2003 launched resource development and management systems for the TVET sub-sectors. Immediately, after a restructuring of the TVET sub-sector, the responsibility for overseeing the activities of TVET institutions by various ministries was transferred to MoES. However, besides the structural change, no other serious reform took place. TVET was never given priority as far as funding was concerned. The allocation of budget to this sub-sector was between 3-4 percent of the total public expenditure on education since the late 1990s. Why did TVET have low priority, despite the outcry for its expansion? Interviews with a senior government officer in the TVET department of MoES revealed that since the SWAp and ESIP were introduced, the power of allocating budget belongs to the planning department of MoES, and the TVET department does not have power over budget planning. The officer also noted that as TVET is not a priority among the majority of major donors and ruling elites, the planning department ignores the TVET sub-sector (interview, August 14, 2009).

Philip Amis (2002) also notes that there is a tendency for partner countries to often mimic the development policy of potential donors to gain funding rather than to openly discuss potential differences. Berry et al. (2003, p. 22) also noted that although government and education funding agencies must agree during the education sector review to determine their priorities, most of the officers working in the education sector perceive the negotiation process as complex, and they often have to bend to the will of external partners if there is no political support from the top leaders.

Actually, in Uganda there is widespread skepticism about the role of higher education as many university graduates are either unemployed or underemployed, and there is an outcry for technical and vocational skilled workers. The drop in priority on primary education since the mid-2000s, as discussed earlier, provides an opportunity for the Uganda government to review its post-primary education policy. Although the Ugandan government stresses the need to expand the TVET sub-sector, TVET remains marginalized by policy makers as far as the budget allocation is concerned; TVET's share of the total public spending on education remains between 3-4 percent. It is for this reason that Nalumansi et al. (2003) argue, 'There is a totally unfair and unjustified bias in favour of higher education and against [B]TVET in Uganda. This bias does not only increase and reinforce the negative work attitudes, damage the image and status of [B]TVET, but also distorts demand for PPET' (p. 5).

Therefore, the lack of priority in TVET is not due to an overall decline of budget for education sector, as discussed earlier (although this affects the overall availability of the amount of budget), but more importantly is due to the inability of government to shift its priorities from higher education. While the TVET sub-sector budget allocation remains unchanged, the budget allocation to higher education from the total public expenditure on education increased from 3.5 percent in 2002-2003 to 9.9 percent in 2003-2004 and to 11.7 percent in 2006-2007. The increase financed the newly established universities in different regions of the country.

Several studies indicate that so far the Ugandan higher education provision does not produce highly skilled workers in the critical fields for the country's development because of its overwhelming enrollment in social sciences, business, humanities, and arts and a lack of student enrollment in science-related subjects. In response to the outcry regarding the lack of graduates in science-related subjects, in 2005 the Ugandan government introduced a quota policy system for its sponsorship in public universities by allocating 3000 slots or 75 percent of its total scholarships for science-related subjects, and another 1000 slots or 25 percent for art and humanities. This project of reemphasis on higher education in Uganda is also a reflection or a continuation of its historical project. First, because of its glorious past of higher education, some advocate for revitalizing higher education to become a center of

excellence, either within East Africa or Africa as a whole and beyond. Second, the Ugandan leadership's vision since independence has been geared towards modernization, which focuses on higher education. This is also reflected in the recent Ugandan national development plan 2010-2011 to 2014-15 that has an ambitious and unrealistic vision and favors higher education over TVET. The development plans attempt to improve the country's competitiveness to levels associated with middle-income countries by promoting science, technology, innovation, and ICT, as measured in terms of the share of exports with high-technology content in relation to total exports.

The shift from primary to higher education is also facilitated by the donor community in Uganda. The initial planning of post-primary education and training has been supported by a pool of technical assistance funding led by the World Bank during the early 2000s. Even if donors want recipients to define their own policies, the starting point of the whole process is the donors' conviction that present policies are in some way unacceptable (King, 1992, p. 261). This pattern of support follows the recent global trend of assisting education in developing countries by donor communities, especially by the World Bank after a series of its publications on higher education and development since 2000, such as 'Higher Education in Developing Countries: Peril and Promise' and 'Constructing Knowledge Societies: New Challenges for Tertiary Education'. These publications argue that for the past few decades African countries and the donor community have neglected higher education in favor of primary education and also demonstrate a positive link between higher education — especially in the field of science and technology — and economic growth. As a result, in Uganda, the World Bank approved a loan in the amount of US$30 million for 'Millennium Science Initiative Project' in 2006.

Cambodia's stronger emphasis on basic education means that it has fewer resources for post-basic education. However, in contrast to Uganda, Cambodia gives priority to TEVT over higher education. At least two possible reasons underlie less emphasis being placed on higher education in Cambodia. First, the lower emphasis may be influenced by Cambodia's historical circumstances, where higher education was completely absent during the genocide of 1975-1979 and was not prioritized by the

government in the 1980s when much of the government's efforts was placed on basic education. Further, there is recognition that the recovery during the 1980s is far from complete; therefore, more effort must be put on consolidating basic education and not higher education.

Second, Cambodia's initial challenge was for education reform to link education and training to the needs of the local labour market and economy, which is different from Uganda's challenge. In the early 1990s, there was a need to change Cambodia's entire education system in order to respond to the new economic and political environment. At least, at the policy level, the educational system had to prepare students to participate in transforming Cambodia from a planned economy into a free market economy and from socialism and a communist ideology to a democratic ideology. Such transformation and reform are seen as the foundation for the country's development.

In the early 1990s, the donors' mission assessment on Cambodia's future investment and development argued that the strengthening of the nation's economy could be most rapidly achieved by strong investments in education and training that provided immediate returns (Duggan, 1997). This argument led to priority being given to TVET over higher education by the Cambodian government and donor community, in particular those led by ILO, UNDP and JICA. JICA is one of the top donors in Cambodia. Worries were rampant about the absorptive capacity of the local labour force and, therefore, the government attempted to upgrade the quality of the labour forces through training and education as experienced in Indonesia (Irawati, 2010). This is because it takes four years for graduates to complete higher education. This long time frame cannot answer the immediate needs for a skilled labour force. Also, they do not expect the skilled workforce from primary education to participate in the labour market for at least two reasons: first, it takes 6 years for pupils to complete primary education. Therefore, education cannot answer the country's immediate needs for skilled workers. Second, graduates from primary education are too young to participate in the labour market and make significant contributions to the overall economy.

As a result, during the early 1990s, a large number of NGOs, both local and international supported by donors, provided a number of flexible, quick response programs to a range of diverse groups. Donors also arranged a number of schemes of vocational training, especially in non-formal training (ADB, 1995). Also during this period, there was an increase in private providers, mainly of English language and computer skills. This situation reflects the priority given to short course training rather than formulating a formal TVET system.

Although this assistance and development were welcome, they had been ad hoc, fragmented and dealt only with immediate needs, without addressing the need for consistent and systematic development of policy and planning for long-term skilled labour needs, quality assurance, as well as aid coordination mechanisms. Therefore, there was a need for a consistent and systematic policy development on TVET. It is within this context that the Cambodian government asked ADB to assist in developing a comprehensive TVET system. This systematic TVET policy was needed to address two critical issues. The first was the abolition of job guarantees in the public sector after the planned economy was abandoned. This development meant that market analysis was required to address the need for skilled labour. Second, the formal TVET institutes in Cambodia are run by different ministries so, they needed to develop not only a systematic coordination mechanism, but also a coordination agency (ADB, 1997).

As a result, in the mid-1990s, MoEYS, with donor support, took a more active role in the TVET sub-sector. Cambodia established technical and vocational centres in several provinces and later expanded to cover every province in Cambodia. Also, a National Training Board, which consists of different stakeholders — government officials, training providers and employers — was established under the leadership of MoEYS. This priority has been reinforced since the mid-2000s with the establishment of the Ministry of Labour and Vocational Training (MoLVT) in 2005. Since then, more attention has been given to this newly established ministry as reflected in the increase of government spending of more than 250 percent within 3 years, from US$ 750,000 in 2006 to US$2 million in 2009. The emphasis on TVET over higher education is also reflected in Cambodian public spending on education. Public

spending per student on technical and vocational education amounted to 80 percent of the total unit cost compared to an estimated 67 percent on higher education.[22] In an interview, a senior officer at MoLVT indicated that the Cambodian government always gives priority to TVET, especially to the middle skilled workforce (interview 12 January 2010).

At the same time, because of the achievement gained in sustained support for basic education during the last decade, ADB supported a pilot project on strengthening TVET led by MoLVT. The Cambodian government also receives substantial bilateral support from Korea, which amounts to US$50 million towards the establishment and strengthening of the national polytechnic university (ADB, 2008b). The Cambodian government also committed to strengthen TVET by contributing about US$100 million to create a national polytechnic university in 2003, according to an interview with the president of the university (interview, 3 September 2008). This support and commitment to TVET are consistent with realistic development plans, which find competition in regional and world markets by focusing on agriculture aimed at rice exports and assembly industry, which requires an investment in TVET rather than higher education. This action taken by the Cambodian government shows a consistent emphasis on TVET over higher education, while such attempts have not been made by the Ugandan government.

The Cambodian education system did not initially prioritize higher education. Since the early 1990s, Cambodia spent an average of only 2 percent on higher education of its total public expenditure on the education sector. Although this may not reflect the situation on the ground as many higher education institutes are not under MoEYS, available data still indicates that Cambodian higher education received substantially lower support than their Ugandan counterparts. Between 1994-1999, the Cambodian government spent approximately US$4.5 million[23] on higher education, while in Uganda, even during the period where priority on higher education was declining, the

[22] Retrieved 03 March 2010, from, http://www.seameo-innotech.org/resources/seameo_country/educ_data/cambodia/cambodia5.htm

[23] Retrieved 03 March 2010, from http://www.seameo-innotech.org/resources/seameo_country/educ_data/cambodia/cambodia8.htm

government spent US$15.3 million in 1999-2000 for only one public university, Makerere University (Musisi and Muwanga, 2002, p. 42). Despite the push from some donors to reform higher education, until recently higher education was never among the top priorities within the education sector investment plans in Cambodia. This is reflected in the fact that until 2005, public spending on higher education in Cambodia was only US$3.67 million (Chen et al., 2007).

Within this context, any development in higher education during this time is mainly driven by external support. The early 1990s saw a refocus on higher education by foreign assistance, especially bilateral assistance rather than multilateral assistance. This assistance carried out two types of activity. First it focused mainly on the expansion of the language department, particularly French and English, in part because they had been prohibited during the 1980s. Second, this assistance supported several studies on higher education, resulting in reports and recommendations for future higher education reform (Denham (Ed.), 1997; Sloper (Ed.), 1999). In the late 1990s, because of the increasing number of graduates from general education, there was an increased demand for higher education. As in the case of Uganda, the limited funds for public higher education during this period led to a reform of higher education. However, Cambodia adopted a different approach from Uganda. While the Cambodian government called for private providers to answer the demand for more higher education, the Ugandan government played a more direct role.

Even the expansion of public universities to other urban areas in the late 2000s was not funded by government budget, as was the case in Uganda. An interview with the vice rector of one the recently established public universities in Cambodia revealed that millions of US dollars were provided by high ranking officials to build university campuses and their infrastructures, and he knew of at least another two universities undergoing the same process (interview, 17 October 2008). Within public higher education, fee-paying classes were introduced. This allowed public higher education institutions to raise their own revenue to supplement the limited support by the government. This also partially explains why high ranking officials became involved in supporting public higher education institutes. Although there were other political reasons behind this support, such as providing scholarships through their supported

public higher institutes for children of party supporters, it was a kind of business for high-ranking officials who supported these new universities as they generated income through fee-paying classes.

II.5 Concluding remarks

This chapter reveals that Cambodian policy design and resource allocation to the education sector and sub-sectors reflects a continuous effort to develop the education sector, which in part follows the experience of successful East Asian countries more than that of Uganda. While Cambodia can sustain its public expenditures on education and its policy's priority on basic education and TVET over higher education as reflected in the allocation of resources to these sub-sectors, such an effort is not seen in Uganda. Instead, Uganda gives more priority to higher education over TVET, and its priority on basic education has fluctuated with a current downward trend, as reflected in its resource allocation. However, while Uganda is aware of the issue of the irrelevance of some higher educational programmes and has attempted to address this issue through modifying its sponsorship program towards more science-related subjects, Cambodia has not done so.

Although there are different contributing factors such as historical circumstances, participation from NGOs, donor agencies, and the Ministry of Education, the political factors and political interest among ruling elites are mainly responsible for policy design and resource allocation. In Uganda, it is important to note that despite the priority given to the education sector and basic education since 1996, the result of the presidential election in 2001 and 2006 revealed that President Museveni's support from voters declined overtime. Therefore, the political interest in prioritizing the education sector in general and basic education in particular was no longer as strong. Consequently, President Museveni changed tactics in an effort to win the next election, moving from performance-based to 'divide-and-rule' tactics. This led to an increase in state-house spending to strengthen its operations and public administration as its administrative unit — the district — increased from less than 40 when he first came to power to 112 by 2010. In the context of lacking extra resources, the budget for other social development sectors in general and for the education sector in

particular was cut in order to meet the increasing needs of the general public administration.

Also, within the education sector, a priority on basic education was replaced by secondary and higher education. This was to fulfill President Museveni's campaign promise made during the presidential campaign of 2006 and 2011 to provide UPPET. The change was also a reflection of Uganda's historical focus on higher education and unrealistic development plans initiated by political visions to improve the country's competitiveness, with a goal of reaching the level of a middle-income country by promoting science and technology, innovation and ICT, despite the fact that their size of industry was very small and low FDI in the high-tech industry (for more detail see Chapter VI). This would require the development of higher education, which includes secondary education as a pre-requirement to enter higher education rather than just basic education and TVET.

In contrast to President Museveni, Prime Minister Hun Sen's popular support has increased steadily since the 1998 general elections, especially in rural areas. Surveys indicate that these victories resulted from the improvement of social services such as education. This situation gives more political incentive for ruling elites, especially Hun Sen, to focus on education in general and basic education in particular as many rural people still lack access to education because of the constraints on the supply side. Unlike Uganda, Cambodia has a realistic development plan that insists on being competitive in regional and world markets by focusing on agriculture aimed at rice exports and the assembly industry, which requires an investment in TVET rather than higher education. This requirement coincides with political interests. Provision of basic education and technical training is very appealing to the vast majority of rural people and the urban poor. This is a strategy that reaps high rates of political return for the CPP.

From a policy perspective and the economics of education, policy design and resource allocation are considered necessary for successful educational outcomes. However, from the practitioner's view point, although they are necessary, they are not sufficient causes to ensure successful educational outcomes. Actually, desirable educational

outcomes depend much more on implementation, a point that will be addressed in the following chapters.

CAPTER III

EDUCATIONAL OUTCOME: COVERAGE AND DISTRIBUTION OF BASIC EDUCATION

'Something' must reach a certain level, amount or size,
and then it will unleash an activity or event that will
change the status quo. ... You need a 'critical mass' to
bring about change, sustain it and render it long-lasting.
A. Gaffar Peang-Meth, Pacific Daily News, April 20, 2011

III.1 Introduction

One of the major issues faced by many developing countries' education systems is to provide basic education to all their citizens. Some studies show that the success or failure of education reform to provide education for all is a matter of policy priority and provision of adequate financial resources (London, 1993; Coclough and Al-Samarrai, 2000). However, other studies indicate that although right policy and sufficient financial resources are necessary conditions for the success of educational expansion, they are not sufficient. In fact, the failure or success of education reform depends on the actual implementation of policy and resources (Psacharopoulos, 1989; Nieuwenhuis, 1997).

As discussed in Chapter II, in general Cambodia and Uganda have increased their public spending on education, especially on basic education, although to different degrees. However, while Cambodia can sustain its priority in investing in education in general and basic education in particular, Uganda cannot. This chapter, therefore, examines the impact of policy priorities and the availability of finances and their implementation on educational outcomes in terms of enrollment and completion rates[24] in Cambodia and Uganda after the end of civil war. This chapter is divided into four sections. The first section will present the educational outcomes in both countries. The second section analyses the factors that affect the educational outcomes in both countries. This task identifies to what extent the different policy priorities and availability of resources, as discussed in Chapter II, and how their implementation affects the outcomes. The third section will compare the educational outcomes in both countries. The fourth section will identify the factors that led to different educational

[24] The completion rate is assessed because it is the level where graduates are supposed to master literacy skills necessary for carrying out written communication for their daily lives.

outcomes in Cambodia and Uganda. The final section contains the concluding remarks.

III.2 Coverage and distribution of basic education

Before the new millennium, in Cambodia and Uganda, the coverage of their primary educational provision measured in terms of gross enrollment rate[25] (GER) was very low. In Cambodia, primary school GER actually declined from 94.50 percent in 1996-97 to less than 90 percent in 1998-99. In Uganda, between 1990 and 1995, primary school GER was even lower than Cambodia at around 70 percent (Deininger, 2003; MoEYS, 1999). Further, there was inequitable access to education among different social groups in both countries, especially between rich and poor children, as seen in Table 3.1.

Table 3.1 % of access to education among different social groups in Cambodia and Uganda in the 1990s

	Girl	Boy	Urban	Rural	Rich	Poor
Cambodia	NER[26]	NER	GER	GER	CAS[27]	CAS
	65.67	68.31	99.50	72.25	80.75	55.50
Uganda	NER	NER	CAS	CAS	CAS	CAS
	53.00	61.00	74.60	60.60	81.70	55.50

Source: NIS, 1998; Deininger, 2003; MoEYS, 1999; MoP, 1998; MoES, 1999

In both countries, two main causes are generally attributed to the low coverage and inequitable access to education. First, there is a lack of physical infrastructure such as schools and classrooms to accommodate more pupils as a consequence of the low public expenditure on education during this period as discussed in Chapter II. Second, due to this low budget spending, government in both countries introduced cost recovery programs, although the actual implementation is different. The cost of

[25] GER (Gross enrollment rate) is the total enrollment of pupils of any age in school as a percentage of the age group population of the correct age for school.

[26] NER (Net enrollment rate) is the percentage of correct age children compared to the school age population who enroll in school.

[27] CAS (children attending school) is the actual percentage of children present in school.

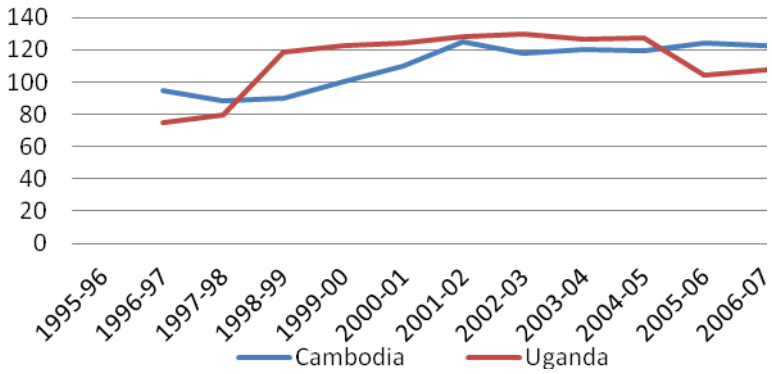
recovery in Uganda allows public schools to charge tuition fees, which amounts to a semi-privatization of education. In Cambodia, there is no tuition fee system; schools are allowed to collect registration fees and contributions for teaching and learning materials at the beginning of each school year, but the fee is very small compared to the tuition fee system in Uganda. However, Cambodian parents bear the burden of informal fees imposed by teachers/school directors. Although, this is illegal, it was tolerated by the central government for at least two reasons. First, the ruling elites, in an attempt to retain loyalty for political support, made no effort to ban this practice. Second, they recognized that they could not provide decent wages for the civil servants and budgets for school operation; therefore, they allowed teachers and schools to find additional resources so the education system could effectively function.

Consequently, the majority of the cost of education was passed on to parents and communities. In Cambodia, Bray (1999) reported that households and communities shared about 59 percent of the total costs for primary schooling. In Uganda, it was even higher; the Public Expenditure Tracking Survey found that parents contributed about 73 percent of total school spending in 1991. Despite the increase in government spending, in 1995 parents still contributed an average of 60 percent of the total cost of primary education (Reinikka and Smith, 2004). As both countries had just emerged from civil wars, the level of poverty was very high; almost half their populations lived below the poverty line during this period. Therefore, poor parents, especially in rural areas, were less able to afford to send their children to school, and if there was a choice at all, boys were given priority over girls, and so poor children and girls in rural areas were less likely to obtain the education available to rich children and boys in urban areas.

At the turn of millennium, as discussed in Chapter II, more resources were allocated to the education sector, particularly to primary education, with the aim of boosting enrollment and addressing the issues of inequality. As a result, there was an enormous increase in the gross enrollment rate in primary school, from less than 100 percent in the early 1990s to over 120 percent in 2000s, as seen in Figure 3.1. Particularly in Uganda, the absolute number of primary school pupils increased from less than 3

million before the introduction of UPE to more than 7 million in the 2000s. However, in Cambodia the increase was modest, from around 2 to 2.5 million. This is because the reform in Cambodia started at a higher rate of enrollment than Uganda and in the midst of low population growth at 1.54. So Cambodia saw a decline in the percentage of school-age children compared to Uganda, which had a very high population growth at 3.6 with no significant decline of the percentage of school-age children.

Figure 3.1 Primary school GER in Uganda and Cambodia



Source: Education indicators from the Ministries of Education in Cambodia and Uganda: various years

The improvement, however, is far from satisfactory, especially in the case of Uganda, as there remains a significant proportion of school-age children who are not enrolled in school[28] and a high rate of school dropouts. These phenomena lead to poor educational outcomes measured in term of primary completion rates (as seen in Table 3.2) and low adult literacy. In Cambodia, the adult literacy rate was 78 percent in 2008, and in Uganda this rate was 73 percent in 2010. Further, despite the increase in enrollment among all social groups, educational outcomes measured in terms of literacy[29] are still unequal, as seen in Figure 3.2, 3.3., 3.4 and 3.5. As during the

[28] From the available data, in Cambodia the percentage of children aged 6-14 who never enrolled in school ranges between 14 to 20.60 percent (NIS, 2005; UNICEF, 2008), while in Uganda the percentage of children aged 6-12 who never enrolled in school ranges between 15.90 to 22 percent (UBOS, 2006b**;** UBOS and MoPS 2009).

[29] The literacy rate was used because data on the completion rate among different social groups are not readily available.

1990s, the literacy gap between the rich and the poor remains large, larger than between boys and girls, rural and urban, despite both governments committment to pro-poor public expenditures.

Table 3.2 % of primary completion rates in Uganda and Cambodia

	1978-84	1994-95	1995-99	2000-04	2005-09
Uganda	77	32	—	58.5	54
Cambodia	—	—	33	60	84

Source: Odada, 1996; Retrieved 20 January 2011, from http://data.worldbank.org/indicators/SE.PRM.CMPT.ZS

Figure 3.2 Adult literacy rate by sex (Cambodia: 2004)

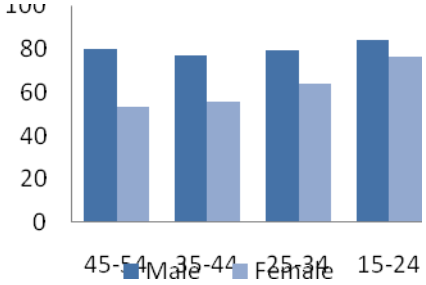
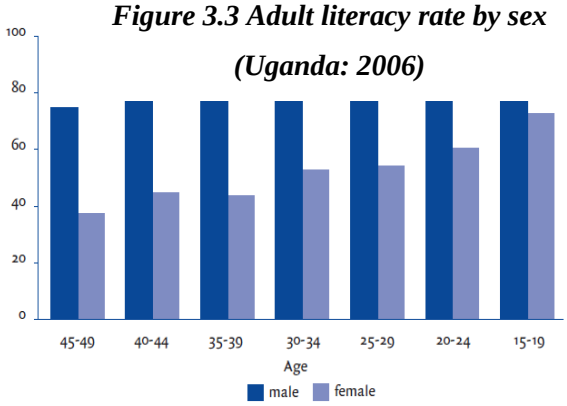


Figure 3.3 Adult literacy rate by sex (Uganda: 2006)



Source: World Bank, 2007a; Policy and Operations Evaluation Department, 2008

Figure 3.4 Literacy rate by region in Cambodia and Uganda

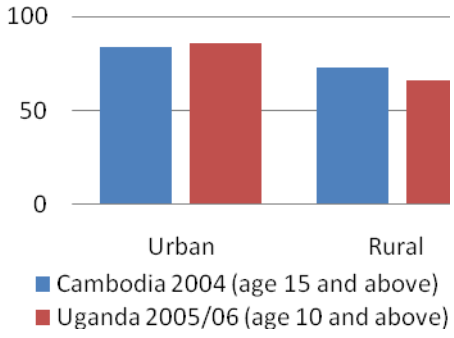
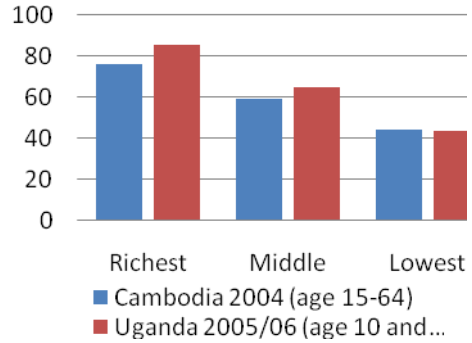


Figure 3.5 Literacy rate by income quintile in Cambodia and Uganda

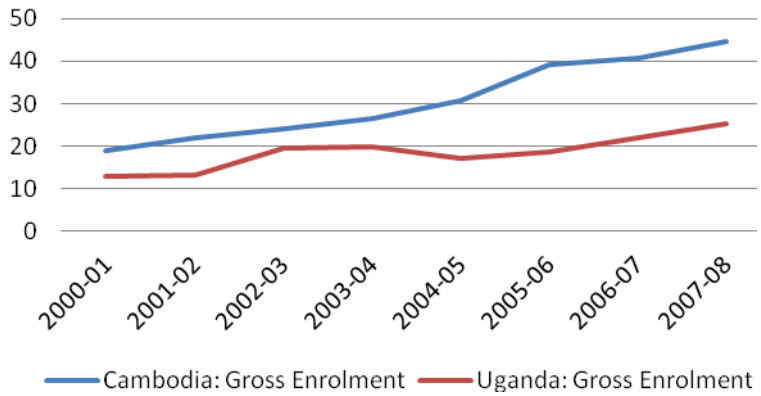


Source: World Bank, 2007a; UBOS, 2006b

The poor performance in primary education leads to poor performance in secondary education. Although, the secondary schools in both countries has improved steadily since 2000s, their gross enrollment rate is still low, especially in the case of Uganda,

below 50 percent, as seen in Figure 3.6, compared to the world average which is 66 percent (UNESCO, 2007).

Figure 3.6 Secondary school GER in Cambodia and Uganda



Source: Education indicators from Ministries of Education in Cambodia and Uganda: various years

It appears that the educational outcome in Cambodia and Uganda resulted from their policies' priorities and the availability of resources, which helped both countries to tackle two issues. First, they provided both governments with resources to develop their physical infrastructure, such as schools and classrooms, to accommodate more enrollments. Second, they provided resources for both governments to address the burden of the demand side, which is widely believed to be the main barrier to access to education. In Uganda the tuition fees in public schools were eliminated through the UPE policy, and in Cambodia there was an attempt to reinforce no school registration fees and contributions at the beginning of the school year throughout the country. In return, schools received a capitation grant that was necessary to carry out their activities. However, policy priorities and availability of resources were not enough to retain all those enrolled in school until school completion and not enough to successfully enroll all school age children. This raises questions beyond the policy priorities and resource availability.

III.3 Cause of non-enrollment and school dropout

The questions are what are the barriers to accessing education and remaining in school?

III.3.1 Direct and opportunity costs

Despite the introduction of free education, some fees are still imposed legally and illegally by teachers and schools, which poor families find very difficult to afford. In Uganda, according to a study by Transparency International, a quarter of parents interviewed confirmed they paid such extra fees, while 18 percent reported that additional bribes had been demanded from them in the past year (Baguma, 2010). In Cambodia, a study has indicated that 41 percent of the respondents were confused about whether the fees they paid for primary schooling were official or unofficial (Deline et al., 2006).

In Uganda, although the percentage of respondents who cited lack of money as the main reason for pulling their children out of school declined from 79 in the late 1990s to 40 in the late 2000s, this percentage remains high compared to the level of poverty, with only 31 percent of the population living below the poverty line as of 2009. It is important to note the cost of schooling is high not only for the poor, but also for the non-poor. Over 10 percent of the non-poor are unable to afford the cost of schooling[30] (UBOS, 2002; 2005; UBOS and MoPS, 2009). On average, Nishimura et al. (2008) found that spending on primary and secondary education per child is equivalent to 2.7 percent and 15.5 percent of total household expenditures, respectively. For poor families whose incomes are very low, their share of the cost of educating children is even higher.

In Cambodia, a national survey of 1513 households in five provinces reported that financial factors such as lack of money were cited with comparable frequency by both boys and girls as a primary reason for dropping out of school (27.4 percent for boys and 26.6 percent for girls) (Bredenberg, 2003). In addition to informal fees, the main

[30] On average, families who can afford to send their children to primary school annually spent UShs20,900 (US$10) for day school and UShs449,000 (US$225) for boarding school per pupil. For secondary school they spent UShs196,000 (US$100) and UShs767,000 (US$335) respectively, with no significant differences between private, NGOs and government schools, but with great differences between regions (Nishimura, et al., 2008).

cost for the poor in Cambodia is private tutoring[31] and the selling of lessons,[32] which are widely practiced, especially in recent times. Such practices take place in public schools and even within official hours. On average, parents in urban, rural, and remote areas in Kampong Cham spent 19, 11 and 10 percent of their annual income, respectively, for sending one child to a public school.[33] In this sense, if these informal fees were calculated, the actual parental costs of schooling were considerably higher than the estimates made six years earlier.[34] Because of this, the study by NEP (2007a) notes that 'parents and children no longer view education as the intrinsic right of every child, and instead start to treat education like a commodity that is available only to those who can afford to pay' (p. 25). Parents who are not able to pay eventually delay enrolling their children or pull them out of school.

This practice is the result of low salaries and limited resources for schools; consequently, observers in Cambodia note that, 'The imperatives of family survival and basic institutional reproduction often take precedence over the policy outcome goal' (Hughes and Conway, 2004, p. 42). According to interviews with people working in the education sector and doing fieldwork, Uganda shares similar characteristics regarding these issues. Actually, because of high inflation rates, especially in Uganda, the budget increases have been very limited, especially in recent years. In Uganda, there was also resistance from schools regarding the free education

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[31] A private class in Phnom Penh and other provincial towns costs 500-1000 riels per hour, while in the less urban areas the costs are between 500-700 riels, and in remote areas between 300-500 riels. This private tutoring is also widely practiced in Uganda despite a ban by the Ministry of Education.

[32] Teachers make a summary of the lessons from the textbook, then make a photocopy of it and sell it in class, usually charging about 5 to 10 times higher than what they spent. This practice is also done in Uganda, but not widely practiced as schools already charge fees for related learning materials.

[33] On average, parents in urban, rural and remote areas in Kampong Cham who can afford to send their children to public school spend an average of 613,900 riels (US$153), 600,200 riels (US$150.05), 440,100 (US$110) yearly respectively (NEP, 2007a).

[34] There are two studies by Bray (1999) and Bray and Seng (2005) between 1997 and 2004 regarding the share that households pay for public education. They conclude that there was a dramatic reduction of household costs in every grade after the introduction of Priority Action Program in 2000, which had the objective of reducing the burden of the cost of education among households. Out of the combined resources of households and the government, household contributions decreased from 77 percent in 1997/98 to 56 percent in 2004.

policy introduced by the government, as schools in Uganda were used to charging fees when cost-sharing was implemented in the 1980s. In interviews with school directors, they argued that the fee that they arranged was suitable to their needs for effective teaching and learning compared to the limited budget provided by government (interview, 11 July 2009; 22 May 2009; 30 April 2009).

Although it seems that formal/informal fees are a school phenomenon, this phenomenon does not happen in the vacuum. Actually, Hughes and Conway (2004) argue that higher authorities continue to emphasize loyalty over efficiency and to promote opportunities for rent-seeking, which exploits the poor from the lowest rural school as a means to ensure the loyalty of their subordinates. In this sense, it is the tolerance as well as rent-seeking by the higher official authorities that keeps this kind of practice going on. Fieldwork in Cambodia reveals that at least 30 percent of what teachers are paid by pupils and parents must be passed on to school management, and this practice is prevalent in the higher levels of education as well. Consequently, no one has been punished for this illegal demand from pupils and their parents, although this behavior violates the Education Law.

In addition, many poor families are not able to afford the lost opportunity costs.[35] A child works either directly in earning money or indirectly by taking care of siblings, which allows parent to work, which is crucial for poor families to survive. Studies that attempt to measure the opportunity costs in monetary terms in both countries reveal that the opportunity costs are even higher than the direct costs (Liang, 2002; ILO et al., 2006). For many Cambodian and Ugandan children, work and school attendance are largely substitutes for one another. Since children in both countries enter school late, they reach 'maturity' in terms of the value of their time by the end of primary school or the beginning of secondary school. This also coincides with the period of the greatest increases in direct education costs. Consequently, direct and opportunity costs reinforce each other to produce a critical barrier resulting in many children not enrolling in school or for those enrolled not being able to stay and thus drop out of school, especially the rural poor and girls, starting even at upper primary levels. This

[35] 'Opportunity cost' is defined as the cost of a forgone economic-related activity when children are enrolled in school.

pattern contributes to low adult literacy rates and low enrollment in secondary schools.

III.3.2 Lack of infrastructure

Empirical evidence reveals that the non-enrollment and school dropout problems, especially in rural areas, are also a result of insufficient schools and classrooms, especially in the case of Uganda (Bredenberg, 2003; ADB, 2004a; UBOS, 2002; 2005; UBOS and MoPS 2009). As discussed earlier, the primary enrollment in Uganda tripled; consequently, this increased demand for more infrastructure, which the Ugandan government has not sufficiently provided. In Uganda, in 2000, about 47.55 percent of sub-counties (428 out of 900) were without government-aided schools. There was also an insufficient number of classrooms. Between 1993 and 2003, Ugandan primary classroom buildings could accommodate only 56 percent of the total school enrollment. And among those, 38 percent of the classrooms were listed as temporary, constructed from non-permanent material, needing rehabilitation, or were in poor condition. In 2005, the Ugandan education system still required up to 138,127 additional classrooms to accommodate the school-age population of 5.22 million (Theunynck, 2009, pp. 2-3).

In Cambodia, in the 1990s, some communities still had a significant proportion of incomplete schools, which means the schools did not have all the primary grades. Therefore, when pupils finished the highest grades in these incomplete schools, they had to transfer to other schools. However, these schools were far from their homes; consequently, the majority of the transfer pupils dropped out, especially girls. There were also a few communities without schools within close vicinity, which hindered the enrollment of school-age children (Bredenberg, 2003). As in the case of Uganda, in 1999 the Cambodian education system required an additional 11,214 classrooms (MoEYS, 1999) to accommodate every child in the school-age population of 1.58 million.

Cause of shortages of infrastructure in Cambodia and Uganda

The substantial lack of infrastructure, especially in rural areas, however, not only resulted from insufficient funds, but also from corruption, which drains resources

from building more schools and classrooms because of their urban bias intervention, especially in the case of Uganda. In Cambodia, and especially in Uganda, there are substantial 'ghost teachers' and 'ghost students'.[36] Only ghost pupils are discussed here; the issue of ghost teachers is discussed in Chapter IV.

Although the exact figure is not available, in Uganda, in one district alone, about 40 percent of pupils were missing during headcounts. The report points out that of 142,000 enrolled pupils, only 85,000 are in school, and this causes the government to lose USh200 million annually since the introduction of UPE in 1997 (Eriku, 2010). Still worse, even 'ghost schools', schools without teachers and pupils, exist in the Education Management Information System (EMIS) of MoES. In one district alone, 12 non-existent UPE schools were found by MoES. The existence of ghost schools costs the Ugandan government more than Ush100 million annually (Bategeka et al., 2004). The reason underlying such practices given by a school teacher is that schools receive more capitation grants from the government and school directors are paid higher salaries according to enrollment numbers (personal conversation, 27 July; 2 August 2009).

In Cambodia, this headcount exercise is absent; therefore, the scope of the problem is not known exactly. So far, only Save the Children Norway-Cambodia reported a case of ghost pupils in one province in its 2008 report. However, my fieldwork in four provinces in Cambodia confirms that the issue of ghost pupils does exist. As in the case of Uganda, the PAP/PB[37] budget is paid according to the number of enrollments, which creates an incentive for such practices. However, the practice is not only limited to financial gain, but is also a result of pressure from central government and donors to see an increased enrollment. The World Bank (2003b) also notes that result-oriented development agendas adopted in the late 1990s lacked a focus on the process in which inputs are cooked to produce results. Consequently, the magic result was

[36] In the context of Cambodia and Uganda, 'ghost pupil' and 'ghost teacher' refer to pupils and teachers whose names exist only on the school and pay-roll lists, but never physically existed.

[37] This programme is designed to improve the education sector by providing direct grants to schools for their operation.

created to satisfy both donors and policy makers through either wrong methodological research findings or fraudulent reports, such as ghost pupils.

The broad practice of creating ghost pupils is the product of opportunists within both the Ministry of Education and schools. The success of dealing with ghost pupils is limited since educational reform is not clearly separated from electoral politics. Recently, school directors were recruited into NRM through the Ministry of Education in order to mobilize support for NRM (Kiggundu and Magomu, 2009). In Cambodia, the majority of school directors and government officers are members of CPP. Therefore, it is hard for the current ruling elites to give administrative punishment to school directors and government officers who are involved in the scandal as it might affect their loyalty. When measures are taken, they are directed towards only a few who do not support the ruling party.

There is also unequal distribution of schools and classrooms in both countries but to a different degree. In Cambodia, for example, during the 1990s, only 5 out of 77 schools had buildings are constructed from the government budget. Four of these five schools were in Phnom Penh, which suggests a severe imbalance in the distribution of the few available government resources (Bray, 1999). Also, the disparity of school and classroom construction among urban, rural and remote areas is compounded by the development of school clusters.[38] The main objective of school clusters is to improve the quality of education through sharing human and material resources, thus allowing strong schools to assist weak schools and stimulating greater parent and local involvement in school activities. In 1995, after the publication of the positive influence of school clusters on high promotion rates, low dropout rates, and better quality teaching, the Cambodian government adopted the cluster model as a nationwide policy. However, in practice the main objective was abandoned. Rather than focusing on quality improvement, it focused only on infrastructure building, mainly in core schools (Geeves, 1999).

[38] A school cluster is defined as a group of 6 to 7 schools within a 7 kilometer radius, introduced by donors such as UNICEF and Redd Bana. Each cluster has a core school that generally has more resources and is situated in a more urban area.

This is because, as Bredenberg (2002) notes, the failure to animate all clusters everywhere is not entirely a matter of inadequate budget support, but of the limited availability of human resources. In the policy, national, provincial, and district cluster school committees help a school cluster's activities. In Cambodia, high-ranking officers were members of several committees because the government was unwilling to allow the establishment of independent committees. Cambodian ruling elites used the reform to provide jobs and extra income for their political allies, rather than focusing on improving education's overall performance. Consequently, these officers had neither the time nor the expertise to lead these committees. Eventually, as quality improvement is difficult to achieve, only hard infrastructure, such as classroom construction, became a reality.

In Uganda, MoES (1999, p. 59) argued that the economic disparities among regions and between rural and urban settings led to different physical facilities, as rich communities are able to contribute more than poor communities. Further, the introduction of the 'Local Government Development Program' in 2000–2001 — in which funds were transferred to both sub-counties and districts in order to implement the development project — reinforced inequality because the funds provided to sub-counties and districts required counterpart cash contributions of 10 percent. Poor rural communities could not raise sufficient revenue so they had no chance to benefit from this program. In the meantime, rich urban communities raised sufficient revenue and thus benefitted from this program.

Others, however, argue that what accounts for the disparities lies within the inequitable government budget allocation for the development program, despite the government's rhetoric of promoting equity. The report by the education sector review reveals that 'In the North, none of the schools visited had received school facilitation grants' (MoES, 2004, p. 20). Currently, there is an outcry for fairness in sharing the 'national cake'. Members of Parliament pushed for new legislation that would ban government funding that did not match the constitutional provision of equity. They even 'alleged that imbalances of all forms were glaring in the government departments, insisting that sectors should produce certificates of equity before the approval of their budgets. This proposed legislation will ensure that there is no bill

passed without the certificate of equity' (Ladu, 2009a). Some other members believed that 'Whatever it takes to address the problem of marginalization in this country should be done, otherwise what's going on is unacceptable. This country is for all of us, including people from northern Uganda' (Ladu, 2009a).

Even within the same district, school facilitation grants and classroom completion grants are not shared inequitably. For example, in Mukono district, which consists of four counties, Mukono and Buikwe, which are more urban counties, each shared 36 percent of classroom completion grants, while the other two counties received only 28 percent. Again Buikwe received the largest share of school facilitation grants, accounting for 43 percent, while the other three received the rest (Katono, 2007). My interview with an education district officer revealed that politicians both at the local and national levels often interfere with the grants. Urban and populated areas, because of their influence in electoral outcomes, often received disproportional amounts of funding at the expense of rural areas (interview, 28 July 2009). In Uganda, school and classroom construction projects are decided by local councils (LC). As local councils are spread around the country, urban areas benefit.

III.3.3 Other reasons for school dropouts

In addition to the shortage of schools and classrooms and direct and opportunity costs, the irrelevance of educational content also causes school dropouts. In Uganda, one in four children who dropped out of school believed they had enough schooling. And this sentiment is higher in rural (26 percent) than in urban areas (15 percent) (UBOS and MoPS, 2009**;** UBOS and ORC Macro, 2002). The existence of this mindset is supported by a study conducted by MoES that reveals school dropout is caused by a perceived irrelevance, imbalanced and the overloaded nature of the curriculum (MoES, 1999). Eilor (2004, p. 24) and argues that there is a greater need to make the curricula more flexible to local needs to attract the interest of the pupils and encourage them to remain in school. But this task is difficult because of the standardization of the national examinations. This raises the question of the relevance of education, especially for rural pupils, in their daily lives and for economic improvement.

In Cambodia, the main factor that contributes to the low demand for schooling is the irrelevance of curricula to the current labour market need, especially for rural and remote areas. Related to this, Bredenberg (2003) found that lower secondary school pupils expressed skepticism about the value of the education they received in terms of its pertinence to their daily lives. Similar perceptions were also revealed by parents 'who do not appreciate that there is a real benefit to their children or themselves in investing precious time and money in education. They see little evidence that an education will make accessible any employment opportunities different from those available to uneducated children' (Nock and Bishop (Eds.), 2008, pp. 58-59). A conversation with a former rural school deputy director indicated that many pupils drop out or do not continue to higher levels of education because they feel that what they learn in school cannot help them generate more income (personal conversation, 15-18 February 2009). In addition to this, but to a lesser extent, the low quality of education in both countries is also reported as a reason why parents are pulling their children from schools, especially in rural areas.

III.4 Cambodia has a relatively wider coverage and more equitable educational provision than Uganda

It is important to note that Cambodia has a lower school dropout rate compared to Uganda. In Uganda, the dropout rate increased from slightly over 10 percent before the introduction of UPE in 1997 to about 50 percent in recent years, especially among girls (Ssenkabirwa, 2010; MoES, 1999; 2007). Available data indicates that despite having free primary education in Uganda, only 49 percent of girls of school age are in primary schools (Monitor Daily, 2005). On the other hand, in Cambodia the dropout rate in primary schools declined, albeit slowly from 15 percent during the 1990s to roughly above 10 percent in 2007-2008 (MoEYS, 1999; EMIS, 2007-2008).

Consequently, while Cambodia was able to steadily improve its primary completion rate, Uganda has not even been able to reach levels achieved during the civil war, as seen in Table 3.2. Further, from Figure 3.2, 3.3, 3.4 and 3.5, we note that Cambodia also has a smaller literacy gap among different social groups, as compared to Uganda. For example, in Cambodia the difference in the literacy rate between boys and girls aged 15 to 24 is only 8 percent, while this difference in Uganda is much higher, at

about 20 percent. In Cambodia, the difference in urban and rural literacy rates is 9 percent and the difference between rich and poor is 34.30 percent, while in Uganda the difference is almost 20 percent and 39.80 percent, respecitively.

It is important to note that Cambodia continues to perform better Uganda. While Cambodia can sustain its improvement in gross enrollment in primary education, in Uganda, since 2003, gross enrollment in primary schools has declined. The report by MoES in 2010 reveals that enrollments continue to decline in 12 districts (Talemwa, 2011). Further, secondary school enrollment in Cambodia is higher than in Uganda, as seen in Figure 3.6. This is because Cambodia has higher primary completion rates, as seen in Table 3.2, which enabled the country to increase its GER in secondary schools from about 20 percent in 2000-01 to over 40 percent in 2007-08, while in Uganda during the same period it increased from less than 20 percent to about 25 percent, as seen in Figure 3.6.

III.5 Factors that led Cambodia to perform slightly better than Uganda

Although it appears that the improved educational outcomes in Cambodia more so than in Uganda are associated with its continuous policy priorities and resource allocations to education in general and to basic education in particular, it is the quality of implementation that is actually the main stimulus for different educational outcomes in Cambodia and Uganda.

III.5.1 Cambodia has relatively lower direct and opportunity costs than Uganda

Given similar situations — high direct and opportunity costs — faced by both countries, why does Cambodia have lower non-enrollment and school dropout rates compared to Uganda? Concerning these issues — related to direct and opportunity costs that address the demand side, that is, the ability of a household to purchase the service — experience from other countries as well as Cambodia reveals that interventions can be made to reduce the burden of the demand side and increase enrollment and retention rates. With support from donors and NGOs, Cambodia adopted several strategic interventions that are pro-girl, pro-poor, and pro-rural.

Their first strategy was the double-shifting system. Cambodian schools are usually organized around two daily 4-hour shifts. Approximately 81 percent of primary schools used two shifts in 2005, a considerable jump from earlier years (Benveniste et al., 2008) and remained in effect until recently (EMIS, 2008-2009). This strategy not only enabled Cambodia to expand its capacity to enroll more pupils, but also helped to retain them in school. This flexible system allowed pupils involved in family work and other income-generating activities to go to school as they would like, in morning or afternoon classes. The education system in Uganda is, on the other hand, rigid. Schools operate in the early morning till late afternoon, which hinders working children from attending school. My interview with a rural deputy school director revealed that many village children do not enroll in school because of family work, and even if they enrolled they did not attend regularly (interview, 28 July 2009). Public debate on this issue is not helpful. Rather than advocate for the reduction of school hours (actually, teachers never teach full official hours allocated to primary education, as seen in Chapter IV), the debate advocates that government provide lunch for more than 7 millions pupils currently enrolled in primary schools (Ladu, 2009b). This demand seems impossible given the current economic situation in Uganda.

The second strategy that the Cambodian government introduced in order to expand its educational coverage provision is multi-grade teaching: combined classes with pupils of different grades in one room and under the supervision of one teacher. Multi-grade teaching is crucial for expanding access in peripheral areas, particularly where populations are dispersed and density is low. Further, according to Benveniste et al. (2008), this allows for a more efficient allocation of limited human and financial resources by assigning one teacher to a class of multiple grades.

Double shifts and multi-grade teaching appear to be mainly a remote and rural area phenomenon, where there is a lack of teachers and classrooms, and where incomplete primary schools are predominant. In remote and rural areas, respectively 70 percent and 22 percent of primary teachers worked a full-day schedule. Just 6 percent of urban primary school teachers taught a double shift. In order to encourage teachers to

take on this additional task, the Cambodian government provides double salaries to double-shift and multi-grade teachers (Benveniste et al., 2008).

In Uganda, attempts to introduce these strategies in the 1990s faced some resistance, especially from teachers and school directors because of a lack of incentives for the workload. Recently, the Ugandan government introduced double shifts and multi-grade teaching in some parts of the country in order to increase access to education, especially in rural and remote areas. At this time, the government faces less resistance since it provides an incentive for teachers. To compensate for the workload, teachers received an additional 30 percent of their salary. This system is working, as one teacher claims, 'The allowance is a good move. We have been waiting for it for so long, but we do not know how we are going to get the money'. Other teachers even demand more: 'We appreciate the allowance but it should be higher. We incur transport, maintenance and lunch dues. The allowance should be slightly higher to at least 50 percent' (The New Vision, 2010a). Further, rural teachers complain that in some rural schools teachers do not receive additional salaries that they are entitled to (personal conversation, August 23, 2009). If this trend continues, it will demoralize teachers and the program will meet resistance, which will hinder the expansion of the program nationwide.

Third, Cambodia implements school feeding programs sponsored by the World Food Program (WFP). This program encourages pupils to enroll and stay in school. However, reduction of this program is associated with declining enrollments and attendance. There is a report that school attendance at participating schools across the country dropped by 20 percent within a month when WFP temporarily cut its breakfast program in January 2007 (Kurczy, 2008). A primary school director at Prey Veng province strongly agrees that a positive correlation exists between free breakfast and the rate of enrollment and retention (personal conversation, various occasions). In another case, a school director at Pursat province was concerned about the decline in pupil enrollment due to the absence of a school breakfast program at her school. She said, 'I am afraid pupils will not enroll in my school and enroll in a nearby school which has a breakfast feeding program in the next school year' (personal conversation during the school visit, 2 February 2009). WFP was providing breakfasts at 1,344

schools, mostly in the rural and remote areas. In Uganda, this program operates only in regions that are seriously affected by the civil war and on-going conflict areas, especially in the northern part of the country. Therefore, its scope is smaller than in Cambodia.

Fourth, the Cambodian government launched a scholarship program[39] for the poor for 30 pupils per school throughout the country. It should be noted that of the 30 pupils who received scholarships, 60 percent had to be girls. In addition to the government scholarship program, other organizations also provided scholarships to poor female pupils, including the Japan Fund for Poverty Reduction and Belgium Aid. Studies on the impact of scholarships found that they helped to increase the enrollment rate between 15-20 percent since their introduction in 2003, and recently reached 25 percent (Filmer and Schady, 2009). In Cambodia, there was even a continuation of supporting beneficiaries when one donor pulled out. For example, Belgium Aid's project has been providing scholarships to over 6,400 beneficiaries at 69 schools over 3 school years (2004-05 through 2006-07), and in 2007 the World Bank CESSP program took over the programme following the withdrawal of Belgium Aid's project.[40] These scholarship numbers outweigh the efforts of the Ugandan government, which offers only two scholarships to two needy pupils in all the sub-counties throughout the country.

Finally, in Cambodia school fees are informal and sometimes illegal so no children are sent back home or are not allowed to continue their studies. In most cases, poor students benefit from benevolent teachers and school directors.[41] The situation in Uganda is different. Since the school fee is formal and legal, school has the authority to impose it on parents and pupils, and sometimes there is even administrative action

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[39] In 2003-04, PAP scholarships had a value of 180,000 riels (about US$45), which was disbursed in installments of 80,000 riels, 60,000 riels and 40,000 riels.

[40] Retrieved 20 March 2009, from http://bett-cambodia.org/en/basic-education-and-teacher-training-bett-project

[41] Poor pupils can obtain a letter from the school director that indicates or directly informs teachers about their families' poor status. With this verification, they either are not required to pay fees or pay a reduced fee for private classes and lessons.

against pupils who have not paid their school fee, such as not allowing them to enter school. In one school I visited, the school director deliberately told the guard during a staff meeting to check whether a student had a receipt of payment (participation in school meeting, 27-30 July 2009). If anyone did not have a receipt of payment, then they were barred from entering the school. Local newspapers repeatedly reported cases of students being evicted from schools (Muwanguzi, 2010). Most parents also pointed out that every term children were sent home because of their inability to pay the school fee and other related fees. Parents struggled hard to find money to send their kids back to school (UBOS and MoPS, 2009). Although some parents were able to send their children back to school, these children lagged behind their colleagues in school work and sometimes lost self-esteem, which could significantly impact their academic achievement.

III.5.2 Cambodia faces relatively less of a shortage of infrastructure than Uganda

Although during the 1990s both countries faced similar shortages of schools and classrooms, most Cambodian villages now have primary schools within their boundaries and the shortage of classrooms is rarely mentioned as a serious issue, as was in the case in the 1990s (MoEYS, 2009). On the other hand, Uganda continues to face serious shortages of infrastructure. In 2009, despite improvement, 38 sub-counties still remained without a single public school. The inability to solve the issue of classroom shortages is also noted by donors. During an education workshop in 2010, a representative from the donor community pointed out, 'Ten years ago, the government raised the issues of a shortage of 50,000 classrooms. This year's workshop also dealt with the same problems of shortage which has now risen to 51,000' (Talemwa, 2010a).

As a result, despite the lower population density compared to Uganda's[42], in Cambodia the average distance to the nearest primary schools in rural areas fell from 5.6 km in 1997 to 1 km in 2004. This change not only promoted the rate of enrollment, but also helped to prevent children from dropping out of school. Such a conducive environment is absent in Uganda. On average, rural children in Uganda

[42] In Uganda, population density is 366 per square mile, while Cambodia is only 204. Retrieved March, 20, 2010, from http://www.infoplease.com/ipa/A0934666.html

live about 4.2 kilometers from a primary school, with a significant difference in distances among the regions; in the central region it is 2.8 km, 3.6 km in the eastern, 5.7 km in the northern, and 4.6 km in the western. This situation not only serves as a barrier for enrolling new school-age children, but also causes pupils already enrolled to drop out of school.

There are two reasons why Cambodia was able to solve the problem of school and classroom shortages while Uganda is not. First, Cambodia has more resources for capital investment, and, second, Cambodia is relatively less corrupt in its school and classroom construction when compared to Uganda.

Availability of resources

It appears that policy priorities and availability of resources contribute to the countries' differing abilities to solve the problem of school and classroom shortages. First, as discussed in Chapter II, donor support in Cambodia is higher and geared toward capital development and not recurrent spending as the majority of support is in the form of project support, especially for infrastructure development. One primary school director expressed his feelings when he said, 'We are very pleased that our school has been upgraded, so that we can provide full primary education to all children living on this island. We thank ADB for its handy assistance to our urgent need' (ADB, 2007). On the contrary, much aid to Uganda is in the form of general budget support that covers recurrent costs and, therefore, reduces the availability of a budget for school and classroom construction.

Further, in Uganda the education sector review agreed that in the future funds allocated to school facilitation grants in primary education should be reduced (MoES, 2006b). Even the planned budget for school facilitation grants was diverted to other uses after an intervention by the central government. For example, in 2003-2004 a report by the education sector review revealed that the 'Cabinet directed reallocation of school facilitation grant fund balances to be used to construct … feeder roads in the district affected by insurgency' (MoES, 2004). This situation is described by the review team as diverting resources from the greater need of education by children in that region. In Uganda, interviews with school directors and education officers

revealed their concerns about the school buildings. In the end, they said, their communities would still have to shoulder the construction of schools and classrooms just as they had before the introduction of school facilitation and classroom completion grants.

The different domestic political contexts in Cambodia and Uganda also led to a difference in the availability of resources for school and classroom construction. Analysis of public expenditures on education reveals that Cambodia spends a higher proportion of its budget for capital development as compared to Uganda. This is because Cambodia is able to reduce wage spending as a consequence of the end of coalition politics; the wage share to total recurrent spending declined steadily from 78 percent in 1997 to 59 percent in 2005, well below the developing norm, which is 70-80 percent (World Bank, 2005c). In Uganda, the wage expenditure for the primary education sub-sector increased steadily, particularly since 2006 because of salary increases from Ush150,000 to Ush200,000. In 2005-2006, only 4.1 percent of central government grants for education allocated to local governments were meant for physical development, compared to 95.9 percent for recurrent spending, of which the wage bill accounted for 91.3 percent (Ssewankambo et al., 2008). Furthermore, the situation continues to deteriorate as a result of the recent proliferation of the districts. While a budget for school and classroom construction is lacking, the government unwisely spent large amounts of funds on new buildings for district headquarters and the salaries of district officials and local politicians in newly created districts in order to gain political support, as discussed in Chapter II.

Further, the problem of a shortage of schools and classrooms in rural Cambodia was solved by politicians, while in Uganda the problem remains unsolved. The most important source of financing for school and classroom construction in rural Cambodia is mainly derived from politicians, especially from Prime Minister Hun Sen, who constructed thousands of schools and classrooms bearing his and his wife's names (as seen in Pictures 3.3 and 3.4) around the country in order to gain votes, as discussed in Chapter II. By 1998, a CPP leaflet campaign claimed that 2000 schools with 9900 buildings had been constructed (Hughes, 2003, p. 77). However, in Uganda there is no such programme from NRM politicians and President Museveni.

At least two reasons underlie the different abilities of CPP/Hun Sen and NRM/Meseveni to invest in school and classroom construction. While improved social services such as education in Uganda since 1997 do not increase NRM/Museveni's legitimacy, he lacks political incentive to invest more in education. However, improved social services in Cambodia since the late 1990s do increase CPP/Hun Sen's legitimacy and thus provide him with political incentive to invest more in education. It is important to note that the Cambodian case is similar to that of Indonesia under Soeharto's leadership, when corrupt money was used for off-budget fiscal activity to finance development such as the education sector (Macintyre, 2000). In Cambodia such support comes from centralized corruption, where corrupt money is concentrated in the hands of the ruling elite who disperse that money for patronage based development, while there is no such possibility in Uganda because of decentralized corruption, a pattern that prevented Museveni from accessing a large amount of slush funds that could have been used for large capital development, such as in the case of Cambodia – an issue that will be discussed in the next section.

Picture 3.1 School and classroom built by Prime Minister Hun Sen, Cambodia

Picture 3.2 School and classroom built by members of the CPP, Cambodia

Corruption in school and classroom construction

The recent inability of Uganda to improve the infrastructure is also due to its widespread corruption in school and classroom construction, as compared to Cambodia. In Uganda, the quality of new buildings and classrooms under central government grants, such as school facilitation grants and classroom completion grants, is very poor and the new buildings are deteriorating quickly. A report by the Ugandan central government notes that, 'The classrooms that were constructed two or three years ago have already developed major cracks, the rendering is peeling off, roof is falling … some floors have developed major cracks and holes, the desks supplied are either unfit for a particular age group or are already dismantling and some structures were abandoned uncompleted' (MoFPED, 2001-02, p. 95). Another report also revealed that some of the classrooms and latrines collapsed before they could be used (Karugaba, 2009). School and classroom construction in Cambodia appears to be better quality than in Uganda, as seen in Pictures 3.1 and 3.2. However, the maintenance of Cambodian schools and classrooms remains a point of concern.

Picture 3.3 School supported by ADB, Cambodia

Picture 3.4 School supported by a school facilitation grant and classroom completion grant from the central government, Uganda

Source: Uganda Debt Network 2002

Although this may result from different donor support models in Cambodia and Uganda[43], it is the domestic context that mainly accounts for the quality of

[43] In Cambodia, because of its direct support for school construction, monitoring processes are not in the hands of the Cambodian government alone, but are also in the hands of donors that provide better quality construction. My contacts at the school level and even officers in provincial education departments support this argument. They further state that the school buildings and classrooms supported by ADB are of even better quality than the ones donated by politicians. One school principal

construction. There are different modes of governance in Cambodia and Uganda. In Uganda, basic services such as primary education are delivered within an ever-changing context of governance, from centralization to highly decentralized through a local council system of government[44] with the district as the main unit of the sub-national government. The overall objective of decentralization is to improve the efficiency of the public service provision and bring services closer to the people. It also seeks to promote popular participation, to empower local people to make their own decisions, and to enhance accountability. In Cambodia, all social services are delivered by the central government with local administrations as their implementer, even after the recent introduction of decentralization. (This section will not explore in detail the decentralization and centralization process in Uganda and Cambodia, but will highlight their roles in school and classroom construction.)

Since the National Resistance Movement (NRM) came to power in 1986, there has been a strong wish — by both the Ugandan government and donors — to move towards decentralization of basic services delivery, such as primary education, through transferring political, administrative, financial, and planning authority from the central government to local government councils.[45] The legal mandate broadens the role of local government, among other roles, to provide and maintain the physical

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mentioned, 'For the ADB's project there is a strict monitoring by technical staff from both ministry and ADB, while the one donated by politicians has no such procedures' (interview, 2 February 2009). In contrast, donors in Uganda move quickly from project support towards general budget support. General budget support leaves much of the implementation to the central government, and then the central government allocates it to local governments in accordance with the decentralization process. Such arrangements leave monitoring processes in the hands of the Ugandan government. Recently, the donor community reviewed its role in Uganda's development efforts. A World Bank representative and chair of a donor group warned, 'The undeniable lack of government action to follow up cases of grant corruption is a key area of development partners' concern. Donors … are currently considering a range of actions … reprogramming away from direct budget support' (Biryabarema, 2010).

[44] The local government structure incorporates five levels ranging from top to bottom as follows: District Council is referred to as LC5, County Council as LC4, Sub-County Council as LC3, Parish Council as LC2, and Village Council as LC1.

[45] Ugandan local government council's mandate and responsibility are institutionally well anchored by a strong legal framework: the Local Government Statute of 1993, the 1995 Constitution, and the 1997 Local Government Act.

facilities and equipment in primary schools, while it limits the role of central government to only policy formulation, planning, and inspection (Ssewankambo et al., 2008).

In Uganda, before the late 1990s, local councilors played a role only in mobilizing support — in cash and in-kind — from grassroots people to construct schools and classrooms. As local people participated directly, they observed how local councilors used their funds, which resulted in increased accountability among local councilors. However, as the poverty level was high in the 1990s, the mobilization of support was limited, resulting in a lack of schools and classrooms to accommodate all school-age children. The role of local councils in school and classroom construction was changed after education reform in the late 1990s. In an attempt to expand access to education for all school-age children, the central government provided funds to local councils to build more schools and classrooms under classroom completion grants, and especially school facilitation grants and other programmes, such as district development programmes, and officially eliminated contributions for school and classroom construction by local communities.

The allocation of domestic development expenditures to local governments rose rapidly from almost zero before the education reform era to nearly 30 percent between 1998-2005. Rushed implementation did not allow enough time to prepare for better execution of the development project, and certainly there was no time to create horizontal and vertical accountability mechanisms. Although school facilitation grants, classroom completion grants, and district development programmes were funded by the central government, it was local government, consisting of a number of councilors (usually called local politicians), who played a critical role in the whole process of construction. Decentralization created a new set of rules and procedures, thus increasing the power of local politicians vis-à-vis district staff, as local politicians have power over the appointment of the District Tender Board (DTB), which is responsible for awarding contracts, and the District Service Commission (DSC), responsible for appointing all district staff including the District Chief Administrative Officer (CAO) and the District Engineer in charge of construction supervision (Francis and James, 2003).

According to legal procedures, tender for school and classroom construction is supposed to be allocated on the basis of a points system that takes into account a range of criteria including price, experience, and records of good tax payments. In practice, however, a letter of recommendation from local politicians is believed to be a crucial prerequisite, and it is widely believed that successful tenders are the companies of their friends and relatives, or protégés of the political class, or proxy companies operating on their behalf (Francis and James, 2003). This is compounded by the fact that Ugandan parents, especially the more financially secure families (local councilors fall within this category), have a long history of sending their children to the few traditional boarding schools. These are considered the best schools and are usually located far from their villages or towns. Therefore, there is a lack of personal interest among local councilors to ensure better quality school and classroom construction for their communities.

Consequently, there is a report that in some cases only a quarter of the tender sum or less is spent on the materials and labour for construction. A report by the Auditor General notes, 'From the site inspection, it was established that there was an estimated overall loss of about 16 percent (sh4.5b) in the sampled districts over the three year period. If this is extrapolated it translates into a countrywide loss of value of about sh15b' (Karugaba, 2009). The district engineers are not able to ask contractors to redo work on buildings since they have powerful ties. In some cases, they are afraid even to conduct site inspections for fear of reprisal because they are appointed by the district service commission that was, in turn, appointed by local politicians. The same feeling is also true for the district chief administrative officer. Those who cannot work within this system usually give up or are forced out. A chief administrative officer at Bududa district claimed, 'I was forced to flee Bududa because my work was interfered with by politicians and I could not make appropriate accountability' (Monitor Daily, 2009).

In Uganda, local teachers and officials express their concern over what they call 'decentralized corruption', which they believe is very difficult to control (personal conversation, 27-31 July; 29-31 July 2009). Decentralization spreads power around the country and involves many stakeholders at many different levels. Consequently,

when a grant is provided to a local government, the central government is not able to properly monitor its use for several reasons. First, there is a lack of staff from central government to monitor the ever-increasing number of newly decentralized offices. Second, there is a lack of funds for inspections because of the expense of monitoring processes. Finally, the most important factor is the attempt to use local politicians by the central government and ruling elites to create and sustain their power base in the countryside, as evidenced by the increase of the number of districts recently, from 30 in the late 1980s to 112 by 2010; thus they tolerate such corrupt practices by local politicians (Crook, 2003; Semakula, 2010). Experience from Ethiopia also reveals that if service delivery improvement is not the central objective of decentralization, there is a lack of commitment from the ruling elites to ensure better outcomes, and it is a very difficult process to overcome (World Bank, 2003a).

In other districts and sub-counties where such corrupt practices are not widespread, local councils and district staffs are not able to carry out their mandates properly because of the lack of capacity and funds. A study on decentralization in Uganda reveals that although there has been an improvement in the overall institutional capacity of the local governments due to the capacity building program in the decentralization process supported by donors, at the sector level technical expertise is still weak. In addition to the lack of capacity, Lister et al. (2006) note, 'The district education office and inspectorate … receive little financial or institutional support from the central ministry, and are solely reliant on districts' local revenues, which vary significantly across local governments (and have lately been undermined by the abolition of Graduated Tax)' (p. 100).

Because of the abolition of the Graduated Tax[46], local governments' revenues have declined from about 35 percent of total funds in 1995-1996 to the present level of less than 7 percent (Ssewankambo et al., 2008). There is an attempt to compensate the Graduated Tax by the central government so that local governments can carry out

[46] Graduated Tax is imposed by law on every male of the apparent age of 18 and every mature female with an income. Graduated Tax is the main source of local revenue — accounting for between 70 and 80 percent of the local councils' total revenues — can cover much of the administrative expenditures, such allowances for councilors.

their responsibilities. However, the compensation does not reach the level of the Graduated Tax collected by local councils, and most compensation is getting stuck at the district level (LC5), meaning that the sub-counties (LC3) are being starved, which is taking a toll (Cammack et al., 2007, p. 35). As a result, grants from the central government are being spent by frontline service providers with no supervision or monitoring by local governments, especially in rural areas.

The experience in Uganda shows that the expectations for the decentralized reforms to bring services closer to people did not bear fruit.[47] Since the mid-2000s, there has been a trend to recentralize the service provision in Uganda in order to reduce decentralized corruption. However, observers note that this is not a fundamental change, but a mere 'changing of the guard'. The change is from local government to central government, and from local politicians to national politicians. This change was intended to provide better services to people. However, the change could make the situation worse as there is a lack of cooperation and overlapping responsibility among the stakeholders. There are three ways in which decentralization was reversed and recentralized.

First, before 2005, all elected local political leaders, up to chairpersons of district councils and executive committee, were paid salaries, and other councilors were paid allowances and transportation costs for meetings and other official duties by their respective local governments. Due to different economic situations, resource-rich districts with the ability to collect relatively large amounts of revenue were able to pay fairly high salaries and allowances to their chairpersons and councilors, whereas those with fewer resources were not. This led to wide disparities in salaries and allowances, despite the fact that they were performing the same responsibilities according to their legal mandates.

The Ministry of Local Government has long noticed this inequality and sought reforms. As such, it welcomed the move by the central government to pay equal salaries to chairpersons and executive committee members at the sub-county and

[47] For more detail see Green, 2008; Francis and James, 2003; Asiimwe and Musisi (Eds.), 2007; Cammack, et al., 2007; Ssewankambo, et al., 2008.

district levels since 2005. Although this seemed to solve the problem of unequal remuneration, it negatively affected the service delivery in two ways. First, due to the inability of the central government to support large members of local government committees, the number of members was reduced from 10 to 5, thus affecting the capacity of local government committees to carry out their mandates. Second, as discussed earlier, since the abolition of the Graduated Tax, districts and sub-counties faced difficulties in paying the other councilors' allowances for meetings and other official duties. This situation, Ssewankambo et al. (2008) argue, not only demoralized councilors, but also generated conflict between unpaid councilors and the executives as the latter are paid by the central government.

Second, district tender boards, which used to be appointed by local councils and answerable to local politicians, were abolished and replaced with local contract committees made up exclusively of civil servants who answered to a chief administrative officer. Meanwhile, the chief administrative officer was no longer appointed by local politicians after the amending of the constitution in 2005. The responsibility for appointment of these officers was recentralized and vested in the Public Service Commission. The change was justified because of the tendency in the past for some chief administrative officers and members of district tender boards to be subjected to influence-peddling and pressure by local politicians to accommodate some local politicians' demands to form instant companies and bid for contracts to provide services or supplies (Cammack et al., 2007, pp. 37-38). Further, the justification for the recentralized appointment of chief administrative officers was that they could then be transferred around the country, making them less rooted locally and therefore more objective. This argument was met with doubt by local people. A senior teacher claimed that in a country that is fragile because of ethnic divisions, having chief administrative officers come from elsewhere with different backgrounds and not be 'the son/daughter of the soil' might not help. It was feared they would just grasp whatever opportunity was given and run away (personal conversation, July 27-31 2009). This fear was rooted in local politicians seeing little transparency in the process of recruiting chief administrative officers. In 2006, all chief administrative officers were required to apply for their jobs alongside new applicants. The former chief administrative officer of Hoima district was not only highly qualified but passed

the interviews, only to be relieved of duty under unclear circumstances. This has led some to believe that appointments depended on more than just merit (Cammack et al., 2007, pp. 37-38).

Further, the appointment of chief administrative officers by the centre opened the way for chief administrative officers to strictly implement directives from the centre, directives that may or may not have been in line with the decentralization process and local interests. Moreover, it reduced local government accountability to local communities as they were not paid by local communities. Consequently, local people could not demand accountability as they did not pay for the services. As one district official commented, 'The one, who is paying for the music, sets the songs' (Cammack et al, 2007, p. 38). This may have caused some marginalization among local people; therefore, resentment was expressed and resistance emerged. This also led to tensions and a breakdown in working relationships among civil servants appointed by the central government and local politicians, thereby affecting service delivery and the quality of administration (Cammack et al, 2007, p. 38). This is because the mandates of local councils are legally anchored in the constitution and the Local Government Act of 1997.

Actually, according to the Corruption Perception Index assessed by International Transparency, Uganda ranks consistently as a less corrupt country when compared to Cambodia since the end of their civil wars.[48] However, the corruption in school and classroom construction in Cambodia is limited compared to Uganda. Although, the decentralization program was introduced in Cambodia in 2002 with the first direct election of commune councils, there was no legal framework for commune councils to collect taxes or directly receive grants for school construction. Therefore, it does not have its own resources to finance school construction, let alone administrative costs. In this sense, it is just an administrative arm of the central government. Further, in contrast to Uganda where local councils have the authority over the tender processes including school and classroom construction, commune councils in Cambodia have no authority over the tender of school and classroom construction. It is still within the

[48] Retrieved 24 March 2010, from http://www.transparency.org/policy_research/surveys_indices/cpi/2009

hands of the central government. Tender is being carried out at the central level by representatives from the Ministry of Finance and Economy and MoEYS.

In this sense, the way in which corruption is practiced is not so apparent, as opposed to Uganda where schools and classroom buildings around the country are built with sub-standard materials; Cambodian schools and classrooms follow a set standard that is strictly monitored by donors. Corruption, however, involves the reduction in the number of classrooms per school. For example, staff from the Ministry of Education mentioned that in the planned budget there were 10 classroom blocks, but when it came to construction only 9 or so classroom blocks were built (personal conversation, 2 February 2009). The lower incidence of corruption in Cambodia is due to its one-stop corruption at the central level, which involves fewer people than is the case with decentralization in Uganda.

III.6 Concluding remarks

This chapter shows that policy priorities and availability of resources appear to have an influence on the educational outcome in both countries as reflected in increased enrollment. The sustained increase in enrollment in basic education in Cambodia is associated with its consistent policy priorities and availability of resources, while the declines in priority and availability of resources for basic education in Uganda are attributable to a decline in enrollment. However, when a more refined educational impact was measured in terms of completion rates, adult literacy and distribution of educational provision among different social groups were taken into account; the results were less impressive, especially in Uganda.

This is because the policy priorities and resource availability were not enough to enroll all children in school and retain them once they enrolled. The high dropout and non-enrollment rates, especially among rural poor and girls — which leads to low adult literacy rates and unequal adult literacy rates among different social group in Cambodia and Uganda — result from the shortages of schools and classrooms and the high direct and opportunity costs, especially for rural areas.

Within the parameter of existing resources, however, Cambodia adopted strategic interventions such as double shifts, multi-grade teaching, school breakfast and scholarship programs to reduce the burden of costs (direct and opportunity) on the demand side and expand the capacity of the supply-side. This facilitated Cambodian students' ability to enroll and remain in school, while such strategic interventions were not fully pursued by the Ugandan government. Although these strategic interventions appear mainly initiated by donors and NGOs, the local political context creates an enabling environment for such policies to be adopted. After all, these are popular policies from which the ruling elites can benefit.

Although both countries faced similar shortages of schools and classrooms in the 1990s, the situation since 2000 in Cambodia has steadily improved. Such a shortage is rarely mentioned as a barrier to education, while the situation in Uganda remains unchanged. This is not only due to the different levels of corruption, but also due to the different patterns of political action in Cambodia and Uganda, which lead to varying depress of availability of resources for capital investment. Although Cambodia's government in general has been ranked consistently more corrupt than Uganda's, corruption in school and classroom construction is less widespread compared to Uganda. The centralized bidding process in Cambodia limits the opportunity for corruption and collusion because it involves fewer people than the decentralized mode in Uganda that allows opportunities for corruption and collusion to spread as it involves tender and people at many different levels of administration across the country.

As a result of the end of coalition politics, Cambodia was able to reduce wage share spending on education, thus it not only had more resources for infrastructure development but also offered more incentives for the CPP to accelerate the development of the education sector since there was no political conflict over the legitimacy of the progress. Parallel to this, Prime Minister Hun Sen and CPP members launched school and classroom construction campaigns around Cambodia that solved most of the school and classroom shortages. On the other hand, Uganda was unable to do this. In fact, the wage share of education spending is on the rise because of an increase in the number of administrative units — districts. The increase provides jobs

for political supporters; but the performance-based strategy that President Museveni adopted so far has not enhanced his legitimacy because of other factors such as ethnic division. This also does not provide any incentive for President Museveni and NRM's members to launch school and classroom construction campaigns, as is the case for Prime Minister Hun Sen and CPP in Cambodia. The centralized mode of corruption in Cambodia also provides ruling elites with a large amount of money to finance development projects, while ruling elites in Uganda are not able to mobilize a large amount of funds to finance development projects because of its decentralized mode of corruption.

There are other reasons for the high rate of school dropouts in Cambodia and Uganda, including the unwillingness of parents and pupils to continue schooling because of the low quality of educational provision and the irrelevance of educational content. This indicates that improving educational accessibility in terms of building more schools and classrooms and providing more teachers will not boost the participation rate if the issue of quality and relevance of curricula is not addressed. The issues of quality and relevancy of education to the local labour market and economic needs of the country will be discussed in Chapters IV and V of this dissertation.

CHAPTER IV

EDUCATIONAL OUTCOME: QUALITY OF BASIC EDUCATION

Our system of education … is to be contrasted with
our highest ideas of perfection itself … The love of
excellence looks ever upward towards a higher standard;
it is unimproving pride and arrogance only, that are
satisfied with being superior to a lower [standard].
Horace Mann (as quoted in Coulson, 2002)

IV.1 Introduction

Since 1990, quality education came to the fore of educational policy, not only because of the realization that pupils had not been learning substantially, but also because of the recognition that a quality education has a positive impact on daily life, whether social, political or, especially, economic, as discussed in the theoretical framework in Chapter I. Cambodia and Uganda reaffirmed this recognition in all their development plans and policies. As far as education is concerned, both governments claim that it is only through an access to quality education that their societies can transform and prosper. In response to this, education reforms in Cambodia and Uganda were accompanied by increased budget expenditures by both governments and donor communities, as discussed in Chapter II, and although to a different degree, aimed to help schools improve their quality of educational provision.

As discussed in Chapter III, the limitation of the government, especially in Uganda to expand equitable access to primary education was the result not only of a lack of resources, but also of other factors, such as corruption and political interference. Therefore, this chapter will analyse the factors affecting the quality of education in Cambodia and Uganda. This chapter is divided into three sections. The first section will present quality education in both countries as measured in terms of the pupils' proficiency in mathematics and literacy. The second section will explore the factors that determine quality education in both countries. This section is divided into two parts. The first part will explore the wider social and political contexts in which the education systems in Cambodia and Uganda are operating and how these factors influence the quality of education. The second part will examine the capacity of their education systems to deliver quality education in two aspects: the effective use of the instruction hour and the quality of teaching within. The final section is the concluding remarks.

IV.2 Quality of basic education[49]

The quality of Cambodian and Ugandan education measured in term of pupils' proficiency in mathematics and literacy is low in absolute terms, as less than half the pupils achieve proficiency (as seen in Table 4.1). Employers are also frustrated about this low quality, especially in Uganda. An employer remarked, 'What's on offer … is free sub-standard education, which makes an already bad situation worse, because … re-educating educated illiterates costs much more time and money' (BBC News, 2005).

Further, as in the case of access to education, a significant gap exists between urban and rural schools' performances. In Cambodia, on average, pupils from large urban schools have 8.15 percent more correct answers in mathematics and literacy than pupils from their small rural counterparts (MoEYS, 2006a; 2008a). An empirical case study reveals that the scholarship program in rural areas that contributes to the increase in the percentage of poor rural children attending school by 25 percentage points, does not translate into any significant improvement in mathematics and vocabulary scores (Filmer and Schady, 2009). In Uganda, the gap is even wider. A study of the primary examination results reveals that urban schools score 18 percentage points higher than their rural counterparts (Policy and Operations Evaluation Department, 2008).

As in the case of access to education, there are different development trajectories in quality improvement in both countries. In Uganda, because of the almost triple increase of enrollment rates, as presented in Chapter III, attempts to improve the quality of education seem to have stagnated. The percentage of primary pupils achieving proficiency in literacy and mathematics declined from 31.82 in 1996 to 30.25 in 2006 (UNEB, 1999; MoES, 2007). This is reflected in the fact that among 21,413 pupils in grade 6, only 28.3 percent could clearly read and tell the time

[49] Our analysis focuses mainly on basic education for two reasons. First, according to the standard classification of education prepared by UNESCO in 1997, primary education is the level at which basic competencies (literacy and numeracy) should be mastered, if it takes more than that the system is inefficient and might waste a lot of resources, both public and private. Second, a failure to provide quality of basic education would not lead to building a good foundation for higher levels of education.

(Kakaire, 2010). An even more worrisome sign was the result of the 2009 primary exit examinations that revealed pupils' performances in all districts and municipalities declined (Butagira and Natabaalo, 2009). In contrast, the quality of education in Cambodia improved, albeit slowly. By 2008, about 50 percent of primary pupils achieved proficiency in literacy and numeracy, compared to 39 percent in 1995 (UNICEF, 1995; MoEYS, 2006a; 2008a).

IV.3 Factors that determine the quality of education

Although the factors that influence the quality of education are found both outside and inside schools, this dissertation is concerned with what is happening in schools. Schools in developing countries such as Cambodia and Uganda play the sole role of educating pupils because parents do not spend or have much time to spend or have the knowledge to educate their children, and their opportunities to experience technological knowledge in everyday life are rather limited, especially in rural and remote areas (Lewin, 1993). For the purposes of this study, we limit our analysis only to public schools because the presence of private schools in Cambodia remains insignificant. In Uganda, although the presence of private schools is significant, the ratio of pupils attending private schools to the total primary enrollment remains low at about 10 percent in 2006-07. And, in general, private schools do not deliver a quality education.[50]

[50] For example, in 2009, 60 percent of students who received government sponsorships (pupils who passed the national examinations with the highest scores) to study at public universities came from the best few schools (Namubiru, 2009). The inability of the majority of private schools to deliver a quality education is due to the commercialization of education. Most of private school owners are businessmen/women focused on profits, rather than educators who care about scholarly achievement (interview May 22, 2009). This is compounded by a lack of quality control by the MoES. First, although private schools do not meet the national standard requirements, the government still issues licenses for them to operate. Second, they are not properly supervised and monitored because of a lack of staff. As of 2009, the Private Education Department of MoES was not staffed; the approved 17 posts were still vacant (Jacob, et al., 2008; Uganda National Commission for African Peer Review Mechanism, 2007; MoES, 2009).

IV.3.1 Education systems: Wider socio-political context

As discussed in Chapter III, corruption is widespread in Cambodia and Uganda, although to different degrees. As education is supposed to train the workforce for increased productivity in the economic sector and to actively participate in social and political fields to promote overall development, it is ironic that the education sector is the most corrupt. In Cambodia, a survey found that corruption in the public education sector accounts for more than half the total corruption in public services (Nissen, 2005). Although exact data is not readily available, anecdotal evidence reveals that a similar pattern exists in Uganda.

Through these corrupt practices (practices that have not changed since the end of the civil war, as I personally experienced), pupils can pass each grade and examination. In Cambodia, pupils who buy snacks and lesson notes from classroom teachers and participate in private tutoring rarely fail. Those who do not are at risk for failing examinations or repeating grades. A villager complained, 'I have three children, I spend 4000 riel ($1) to buy my children's examination score, but not the knowledge for my children … no money, no score, no good record' (FitzGerald et al., 2007, p. 16). For parents, repeating a grade costs them even more. Therefore, for those who can afford to attend school, there is no option but to sustain this corrupt practice.

For many parents, their expenses are also an expression of sympathy for the teachers' hard work to educate their children, despite low salaries. This is why there is not much complaining about the issue. There are also no complaints from the poor, as discussed in Chapter III, because they are exempted from these informal fees. However, this situation, according to a teacher, negatively affects the quality of teaching as it shifts the teachers' concentration from teaching to assessing the pupils' financial conditions. This assessment consumes teachers' time and consequently reduces their teaching time (personal conversation, 17 September 2008.). Further, group discussions revealed that poor pupils experience feelings of shame from the teacher for their inability to afford lessons or to participate in the private class. Such shame could drain students' attention and motivation from learning and in extreme cases may result in pupils leaving schools (focus group discussion, August 30, 2008.).

During examinations, cheating by giving small amounts of money to teachers has become a standard practice for generations. It has become such an entrenched tradition that Cambodia even has a saying, 'Pel Brorlong Keu Pel Chamlong', meaning 'Exam time is time to copy from others or notes' (which rhymes in Khmer). Pupils who do not want to take the examination can simply buy their scores for $20 to $35 (Lebun, 2004). Actually, the whole system of corruption encourages this practice. Teachers point out, 'Why should we fail students if they can give money to officers at academic study offices and change the score? Therefore, we just let them pass and get whatever they offer to us' (personal conversations, 17 September; 6-7 October, 2008).

In response to the public outcry about corruption in the education sector, MoEYS launched an anti-corruption campaign to combat teachers demanding illegal pay from pupils. With support from NGOs and donors, advertising banners were placed in schools, and the media also disseminated information announcing, 'Lesson and snack selling and paying teachers are prohibited'. Also, as discussed in Chapter II and III, educational policy formulation and implementation were subjected not only to corruption but also to political influence. David Ayres (1999) argues that in Cambodia, 'The final theme dominating the current policy context is what has become a very substantial gap between educational policies as developed by MoEYS in consultation with donors and those policies which are realized in practice' (p. 59). Consequently, no one agrees to punish teachers who violate the law, the usual reason given by the government being that teachers' salaries are very low.

In Cambodia, low salaries for teachers may result from the overall low revenues. However, the controlling factor is ruling elites who deliberately keep salaries low until they find better strategies to earn the loyalty and support of civil servants in order to win elections. The low pay allows the ruling elites to directly control and maintain loyalty by tolerating the misbehavior of teachers and school directors, such as petty corruption and absences. Caroline Hughes (2003) argues that an increase in salaries would shake the foundation of loyalty. She writes, 'The assertion of demand for a living wage undermines the selectivity of such relations, and offers opportunities for horizontal alliances that can prompt the breakdown of vertical relations of loyalty' (p. 188). On the other hand, because of low salaries, civil servants in general and

teachers in particular are forced to find alternative jobs in order to generate more income to support their families; therefore, they do not have the time and energy to challenge existing political arrangements.

Under certain circumstances, Cambodian teachers are advised to let pupils pass.[51] The competition for the best schools across the country leads school directors and officers at provincial departments of education to do everything possible to promote pupils so as to avoid negative evaluations and to receive bonuses from their supervisors. This practice includes not only allowing students to pass their classes automatically, but also to pass critical examinations at each level of education. For lower secondary examinations, the deputy school director who participates in the examination marking notes that in the first round of corrections if there are too many pupils failing the provincial departments (who may have directions from MoEYS) may curve the grades in order to meet the required percentage of passing pupils (personal conversation, 5-18 February 2009).

For high school, the percentage of pupils passing examinations is sky-rocketing, especially since the introduction of private universities in the late 1990s. This percentage increased from 7 percent in 1994 to over 90 percent recently (Duggan, 1997; MoEYS, 2009). By allowing more students to pass, MoEYS achieves two objectives. First, it shows the improvement in the education sector, and, second, MoEYS receives benefits from private higher education institutions. According to a teacher and long term expatriate working in the education sector, these private institutes pay MoEYS to help as many pupils pass as possible, but with low grades (interview, 7 August 2008; personal conversation, 6-7 October 2008). In the 2008-2009 and 2009-2010 school years, only two and one student(s) respectively passed each year with the letter grade A among 90,000 candidates. The majority earned grades of D and E. If they wanted to continue on to a university, they could do so only by paying tuition fees (they would not receive scholarships).[52]

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[51] This is not only in the lower levels of education, but also in higher education. During my teaching years at the university, I also received these directions.

[52] The government's policy is to give around 2000 scholarships — fee-paying free — for pupils who pass with the highest grades to study in public higher education institutions. Private higher education

The desire to achieve two sets of objectives by MoEYS, compounded by students' desire to pursue higher education,[53] led to corruption during high school examinations. An exam controller explained that for wealthy families buying a passing grade is easy. Grades A and B have a fixed rate of $2000 and $1200 respectively, and grade C is negotiable, but generally costs around $700-800. There is also a cheaper method that pupils exploit (as seen in Pictures 4.1 and 4.2): The answer sheets are smuggled into classrooms and pupils pool $1 or $2 (sometimes higher) per subject and give the money to two controllers employed to monitor the exam. It happens in almost every school, but MoEYS never disrupts the process because the money is shared between those involved (Khouth and Mon, 2010; Khouth and Schonerker, 2010; Shelton, 2007).

Picture 4.1 Police guard the school grounds during an examination to control cheating, Cambodia

Source: Shelton, 2007

institutions also provide scholarships to pupils, usually an unspecified number. Pupils with grades of A, B and C receive 100, 75 and 50 percent fee-paying free, while the rest pay the full fee.

[53] The desire to continue to higher education results from two factors; first, higher education is now a gateway to formal employment, and, second, the private return from higher education is higher than other levels of education. Details about higher education in Cambodia and Uganda will be discussed in Chapter V.

Picture 4.2 Pupils at a photocopy shop at midnight, waiting to make copies of a pilfered final exam, Cambodia

Source: Kay, 2008

In contrast to Cambodia, which adopts a silent automatic promotion policy, Uganda openly declares a system of automatic promotion. Once children are enrolled in Primary One, they then move up to Primary Seven regardless of whether they have learned to read, write or calculate. Observers and analysts have noted that this situation has begun to undermine the quality of education. While the objective of universal education is undoubtedly beneficial for every Ugandan child, the absence of quality enforcement or alternative means for checking the progress of pupils might result in them receiving less than optimal quality education (Kalenma, 2009; The New Vision, 2010b; Ssenkabirwa and Mitti, 2010). Even grading was influenced by policy initiatives at the central level. As an examiner acknowledged, the government initiative was to boost science education, so there was almost 95 percent compassion in the exam grading (Nalubwama and Lumu, 2010).

As in the case of Cambodia, in Uganda pupils also desire to pursue higher education. Further, pupils desire to earn high scores on national examinations for two reasons. First, they may be eligible for not only the best schools and universities, but just to be admitted at all is difficult because of limited space. As discussed in Chapter III, the shortage of schools and classrooms in Uganda is a serious issue. Second, high scores allow them to receive government scholarships. It is important to note that the desire to obtain government scholarships is very strong in Uganda as pupils not only study

for free but also receive substantial support for living costs and learning materials. This kind of assistance is absent in Cambodia.

The desire to receive government assistance for pursuing higher education degrees leads to widespread dishonesty during examinations. These practices include cheating, collusion, impersonation (other people sitting for the candidates), access to examination questionnaires prior to the day of examination, smuggling notes into the examination rooms, using prepared answers to address the questions, candidates helping each other and teachers who serve as controllers helping candidates (UNEB, 2003). The issue of dishonesty during examinations was serious in Uganda, leading to a reform of control mechanisms, which included the introduction of CCTV monitoring cameras in and around examination printing areas in 2010 (Ainomugisha, 2010).

This corruption and dishonesty during examinations resulted in discrepancies between students' actual proficiency and the official passing rate that is almost two times greater, as seen in Table 4.1. This is because the socio-political contexts in which the education systems in both countries operate discourage hard work. The education systems also fail to form ethics and build character in pupils, which are necessary for self-sufficiency in order to participate in society in general and in labour markets in particular. It is in this sense that in Cambodia Marg Froude argues that cheating on examinations gives pupils 'a false sense of what they know and the country a false sense of what their graduates are capable of' (Kay, 2008). In Uganda, Matthew Odada similarly argues cheating 'is one manner of corruption and one sure way of corrupting youth. The youth who "passed" via malpractice are a danger to themselves and to society' (UNEB, 2003, p. 20).

Table 4.1 Comparison between the % of pupil's proficiency and pass rates in Cambodia and Uganda

Country	Grade 3		Country	Grade 6	
	Proficiency	Pass rate		Proficiency	Pass rate
Cambodia 2005-06	40.4	78.2	Cambodia 2006-07	68.4	85.6
Uganda 2005-06	39.5	77	Uganda 2004-05	21	70

Source: EMIS, 2005-06; 2006-07; MoEYS, 2006a; 2008a; MoES, 2006a; 2007

IV.3.2 Poor quality education systems

Most of the literature on education reform treats the relationship between pupils and teachers where learning and teaching truly occurred as a black box (Leclercg, 2004). The quality of interaction between pupils and teachers that leads to improved learning results can be found in two aspects of education: the effective use of instruction hours and quality of teaching, which in turn depends on the quality of the teachers and their numbers and on teaching materials such as textbooks and laboratory equipment. This section will examine these two aspects of the Cambodian and Ugandan school systems.

Ineffective use of instruction hours

Studies conducted to assess how many actual instruction hours do happen in classrooms in both countries compared to the official instruction hours reveal a significant discrepancy, especially in rural schools. There are several factors that contribute to this discrepancy, such as schools being closed more than on just official holidays and teachers arriving late and leaving early. But the most serious issue is teacher absenteeism. Studies in Cambodia found out that 22 percent of respondents said that teachers were absent either frequently or very frequently, and in Uganda 55 percent of teachers considered teacher absences a serious problem, with a much higher percentage in rural areas (Geeves and Bredenberg 2004; Policy and Operations Evaluation Department, 2008). In Uganda, in the most egregious cases, teachers came to work only once every three weeks (Kagolo, 2009a).

The reason for teacher absenteeism: According to several surveys, the major reason for teacher absenteeism in both countries is related to their welfare, especially their low salaries. In Cambodia and Uganda, the average salaries of primary teachers are around US$65 and US$95 per month respectively, compared to the salaries of members of the national assemblies in both countries, which is more than US$2000, plus other benefits to which teachers are not entitled (Namutebi and Osike, 2007).[54] In the case of Cambodia, Hughes and Conway (2004) conclude that 'inadequate pay is the fundamental constraint on improved state performance … particularly in labour intensive service delivery sectors such as education' (p. 42).

The high level of teacher absenteeism in Cambodia and especially in Uganda, however, is not only due to welfare related issues, but is also the result of weak leadership and management. In Cambodia, from the teachers' perspective, MoEYS and management at the school level are the greatest source of teacher dissatisfaction. This is compounded by corruption and nepotism, which distract teachers from effective teaching. If these factors were attributed to the same root causes and consolidated, they would outweigh salary issues and become the most significant cause of dissatisfaction (Nock and Bishop (Eds.), 2008, p. 14). This is more evident in the case of Uganda. A study by Jacob et al. (2008) noted that teacher absenteeism in public schools had been on the rise despite an increase in salaries of 50 percent since 2005. Further, on average, private schools pay their teachers 25 percent less than public schools, but their teachers are absent less frequently (Manafwa, 2009; UBOS, 2009a, p. 14).

A Ugandan researcher notes that, 'As private teachers, if you do not come to teach, you are not paid and might risk being fired. So you come to teach. But as the government civil servant, you still get paid although you are absent' (personal conversation, 7 May 2009). In Uganda, from a school perspective, the problem lies at a higher level of administration, where disciplining absenteeism is out of its control. Teachers have their salaries sent to their bank accounts, a practice generally believed to be effective from a public financial management and civil service reform point of

[54] Yimust, R. Cambodia must take serious and painful reforms. Retrieved April 25, 2011, from htttp://www.mekong.net/cambodia/must-reform.thm BROKEN LINK

view, but school directors complain that they have no means of disciplining teachers by withholding the salaries of non-performing teachers (Jacob et al., 2008).

In other words, schools are not the bosses of teachers; schools are not the ones who hire and fire them. In cases where school directors would like to take actions against non-performing teachers, they face not only long bureaucratic processes[55], but also slow responses. This is not only because of the inefficient and ineffective public administration, but also because of political interference, as teacher support is crucial for electoral success. Anecdotal evidence indicates that a large number of teachers in both countries are members of the CPP and the NRM. Further, as pupils in Cambodia and Uganda entered school late, they reach the age of voting during their general education; therefore, teacher support in the electoral success is even more important as they can influence and mobilize their pupils. Furthermore, there is widespread corruption in teacher recruitment and the deployment process. Consequently, the corrupt officers at higher levels are not keen to take action against non-performing teachers. If actions are carried out, they are done selectively against those who are not part of their in-groups. Or non-performing teachers are merely transferred to other schools. A school director in Uganda complained, 'It takes too long to dismiss an erring teacher … call in the board and eventually you write to the ministry. The ministry then has to go to the disciplinary council. Sometimes, even the process is not followed because a troublesome teacher is transferred to another school, with unresolved issues' (Kibirango, 2010).

Still, wide-reaching empirical studies indicate that school directors have perhaps the most important single influence over teacher performance. In Uganda, a study found that, 'Within a few years, a school director can transform a school by attracting and retaining a well-qualified and highly motivated staff and by providing strong instruction leadership. The reverse is true: a poor school director can quickly turn an

[55] In Cambodia, a case must be brought to the Ministry of Education, then to the Secretariat of Public Service through its district and provincial education departments, and in the case of Uganda, up to the Public Service Commission through district offices and the Ministry of Education. These routes are necessary because many mid-level (provincial and district) administrators do not have the authority to make decisions or act on information available to them.

otherwise good school into a bad one' (Policy and Operations Evaluation Department, 2008, p. 118). For example, in 2008 Jinja SS School was characterized by frequent strikes. Students and support staff took turns protesting in the streets of Jinja town. Only 20 teachers were present, yet the school had more than 130teachers. With a new school director, in late 2009 follow-up school visits revealed operations were back to normal, although there was still room for improvement. In an interview with local newspapers, the new school director claimed that in 2008 the school operated as if there were no school director (Musasizi, 2010). In Cambodia, interviews with education advisors and project managers strongly indicated that school directors are the key to good school performances despite location — whether urban, rural, or remote areas (interview, 6 September 2008; 8 September 2008).

Unfortunately, in general, school directors in both countries lack the capacity and commitment to be effective leaders. Fewer than one-third of school directors in both countries have upper-secondary education with teacher training and beyond (EMIS, 2007-2008; Liang, 2002; Policy and Operations Evaluation Department, 2008). Further, school directors' absenteeism is also high. In Uganda, school directors at government schools are twice as likely to be absent from schools as are regular teachers. The overall percentage of school directors on task (found at work) actually declined from 70 percent to 62 percent between 2009 and 2010 (Vaughan and Izama, 2009; Talemwa, 2011).

In Cambodia, expatriates working in school leadership programs indicate that school directors almost never spent their time outside the offices. School directors do not serve as role models involved in communities, involved in such tasks as reading books, attending technical meetings, or talking to teachers and students. Therefore, they are not fully aware of teacher absences (interview, 6 September 2008). School observations as well as my own experience working in the education sector reveal that the majority of school directors in Cambodia who have been employed since the 1980s are nearing retirement age; some even changed their birth certificates to appear a few years younger so they can continue to work. In fact, they are 'working', just waiting for retirement and do not care about education. It is important to note that civil servants in Cambodia once employed remain in their posts until retirement,

unless they are promoted to higher levels. They are working without any official terms of reference that their performances can be measured against.

In Uganda, Herger, at al. (2010) conclude, 'The weak district inspection function, under the responsibility of the district inspectors, is one reason why significant teacher [and school directors] absenteeism remains unchecked' (p. 24). This is also true in the case of Cambodia. In both countries, despite reform in inspection systems in the late 1990s, schools are rarely inspected. In Uganda, although schools are supposed to be inspected three times a term, most schools were actually inspected only twice a year. Some schools are inspected only once a year, while others are never inspected at all, especially in rural areas (Makerere University, 2009; Ssenkabirwa and Oluka, 2010; Oluka, 2010). The overall number of school inspections even declined from 76 percent in 2009 to 69 percent in 2010 (Talemwa, 2011). In Cambodia, inspectors from MoEYS and the provincial Department of Education offices inspected teachers less than 15 and 40 percent of the targeted inspections, respectively. Surprisingly, inspectors at the district level, which is closest to schools, inspected teachers only 30 percent of its planned inspections (MoEYS, 2006b).

From a technical perspective, both countries face two challenges that together block the emergence of effective supportive and inspection system. First, there is a lack of (qualified) staff both at the central and local levels. For example, in Uganda, at the central level, as of 2008, 54 percent of posts in the Education Standard Agency are still vacant almost a decade following its establishment (Oluka, 2010). As of 2009, in the Directorate of Education Standard at the Ministry of Education and its regional offices, 80 and 40 percent of posts respectively are still vacant (MoES, 2009). This situation is worsened by the expansion of schools recently. Consequently, the inspector-school ratio in Uganda and Cambodia currently stands at 1:90 and 1:125 respectively, which is far above the internationally recommended ratio of 1:40.

Second, there is a lack of transportation and budget, especially to access the hard-to-reach areas where conducting inspections could cost more than the budget allocated to the schools (Ssenkabirwa and Oluka, 2010; Oluka, 2010; MoEYS, 2006b). In Uganda, although budget funds are allocated to schools through local government, no budget is

allocated to the district education office's (DEO) management and supervision functions, except salary. Hedger et al. (2010) write, 'For many local governments the role of DEO has been that of a postman, receiving funds from central government and transferring them on to school' (p. 22). A personal conversation with an inspector indicates that he inspected schools only if there is a budget. When there was no budget he stayed at his office (personal conversation, May 1, 2009).

At first this appears to be a technical problem. However, the corruption and political interference in the recruitment process, which provide no incentives and hinder the government's efforts to establish an effective inspection and supervision system, tends to lower any sense of accountability and commitment by teachers and school directors to professionally perform their jobs .

In Uganda, for example, over 50 teachers petitioned the district council to investigate the conduct of the commission in their district. The teachers claimed that they acted as school directors in various schools for over 10 years. But when the District Service Commission (DSC) conducted interviews, teachers' testimony was never considered because they did not bribe officials. An independent committee investigation into the recruitment process at Bushenyi District Service Commission found that public servants each pay 50,000 Ugandan Shillings to the commissioner secretary before they are shortlisted for interviews (Aruho, 2009). In Cambodia, David Ayres (2000b, p. 182) argues that educational policies in post-UNTAC Cambodia were subjected to the whims of the nation's political leaders. Educational policies developed by MoEYS in consultation with international advisors and in congruence with international practices were implemented only when they did not conflict with immediate imperatives of those in control of the apparatuses of the state. Examples following this line of thinking can be found in other areas of education, including building more schools and classrooms, but not to the extent that people are punished for absenteeism or for not working professionally since this might affect their loyalty.

Given the similar challenges, why are rural teachers and school directors absent more often than their urban counterparts? This problem does not stem from hard living conditions in rural areas and different quality of inspections and supervision, but from

teachers' and school directors' inability to earn extra income in classrooms and schools by selling snacks and lesson notes, and by charging informal fees for private tutoring that poor rural pupils and parents are unable to afford. Therefore, rural teachers are likely to be absent more often in order to find additional income to supplement their low salaries or from lack of incentive to be at school and teaching. In contrast, urban teachers must be present to teach in order to earn extra income in the classroom and school. The discussion among Cambodian professionals reveals that urban teachers have to pay up to 30 percent of their earnings through private tutoring and informal pay by pupils to school directors in order to secure their jobs. This situation forces virtually all teachers to be involved in earning extra income in school. As a teacher claimed during a conversation, 'Not doing so means we cannot socialize with other teachers nor be promoted by the school director' (personal conversation, 6-7 October 2008). In Cambodia's urban schools, in order to try to catch up with pupils who are more financially secure, many poor pupils skip their breakfasts to save money to attend private classes and buy lesson notes. This is because teachers use these fees as 'blackmail'. Usually, examination questions are the same as what is taught in private classes and appears in sold lessons.

In Uganda, private tutoring, commonly referred to as 'coaching', is illegal. However, reports reveal that these coaching sessions called 'Term X' are widely practiced in urban areas as rich parents can afford it. One pupil said teachers who attended 'coaching' started school breaks at the same time, but resumed two weeks earlier than others for coaching lessons (Musasizi, 2009). Similar to Cambodia, in Uganda coaching is used as 'blackmail' in the sense that what is coached is a continuation of the official curriculum and will not be repeated when the normal term resumes. Students who miss the coaching miss part of the official curriculum. Further, in Uganda, communities and parents in urban areas have more power to monitor schools' and teachers' performances than their rural counterpart as they contribute significantly — voluntary or compulsory — to the welfare of teachers and school development programs through Parent Teacher Association fees, while rural poor communities

have no such power as they do not pay the fees.[56] The result is that urban teachers and school directors perform their duties more regularly than their rural counterparts.

Poor quality teaching

Successful education reforms to improve the quality of education require the availability of (qualified) teachers and teaching materials such as textbooks and laboratory equipment. These are the two keys so successful education, as compared to other types of inputs (Darling-Hammond, 1999; Hanushek and Wößmann, 2007). In fact, the findings of this study and others indicate that the lack of these key inputs (a lack of qualified teachers and the availability of teaching materials) have negative effects on learning achievement in Cambodia and Uganda (Kemp, 2008; Policy and Operation Evaluation Department, 2008). However, why there is a lack of these inputs and how these inputs could be used, if they exist, to achieve desirable outcomes has not been well investigated. This section attempts to answer this question.

Lack of (qualified) teachers: From the available official data, at the national level, there seems to be no significant shortage of teachers in both countries.[57] However, school visits in both countries revealed shortages of teachers as evidenced by high teacher-pupil ratios in the classroom, especially in Uganda. Further, there is an unequal distribution of teachers. In rural Uganda, a baseline survey indicates that the teacher-pupil ratio is as high as 1:104 (MoFPED, 2009b) compared to a national average of 1:57. During field visits in rural areas, in some cases the teacher-pupil ratio stands at nearly 1:200 (as seen in Picture 4.3 and 4.4). In rural Cambodia, the teacher-pupil ratio is reported to be 1:80 compared to a national average of 1:49.3 (Benveniste et al., 2008). The serious shortage of teachers in rural Uganda is due to its high

[56] There are two types of public schools in Uganda. One is pure free education offered by the government for which officially no fee is charged, but schools receive capitation grants from the government to run daily school activities. Another is the semi-private school in which the government allows its public schools to charge fees if they do not apply for school capitation grants, but they still receive government support in terms of teacher payment and infrastructure development. Usually, the semi-private schools are located in urban areas that rich urban parents can afford, while free education is found in rural areas where poor rural parents are unable to afford fees.

[57] In 2008, in Cambodia, the teacher-pupil ratio in primary schools was 1:49.3 and in Uganda 1:57, compared to their target policy, which is 1:50 and 1:55 respectively (EMIS, 2008/2009; UBOS, 2009b).

teacher attrition rate of 9 percent compared to a national average of 4 percent, while in Cambodia teachers' rates of turnover are very low in both urban and rural schools (Fox and Liebenthal (Eds.), 2006; Mulkeen and Cheen (Eds.), 2008; Benveniste et al., 2008).

Picture 4.3 A classroom in Masindi district, Uganda

Source: Nannyonjo, 2007

Picture 4.4 A classroom in Jinja district, Uganda

The shortage of teachers, especially in rural areas, is caused by ineffective and inefficient teacher management that is caused by political interference and corruption, rather than a shortage of funds to recruit teachers. In Uganda, in the early 1990s, 20 percent of the total government budget for salaries was paid to non-existent ghost

teachers (Policy and Operations Evaluation Department, 2008; Hallack and Poisson, 2007; Reinikka and Smith, 2004). Although there is no official report about ghost teachers in Cambodia, it is plausible that they exist given the overall high number of ghost civil servants in recent censuses and the fact that teachers constitute a majority of civil servants. A 1995, 2000-2001, and an unfinished 2010 census uncovered roughly 18,000, 9,000 and 2,000 ghost civil servants respectively (Sam and O'toole, 2010). The attempt to fight against ghost teachers is far from complete; teachers abandoning their duties and the repetition of teachers' names still exists (MoES, 2008b).[58] A field visit in Uganda revealed that one teacher continued to collect the salary of his colleague who went to the United Kingdom four years earlier (personal conversation, 27 July - 2 August 2009).

Further, there is a high percentage of non-teaching staff compared to teaching staff in both countries. Despite reform attempts to reduce the percentage of non-teaching staff, in Cambodia, after 8 years of implementation, the proportion of non-teaching staff remains almost the same: 22 percent in 1999-2000 compared to 21.52 percent in 2007-2008 (EMIS, 1998-1999; 2007-2008). A possible reason for the difficulty in achieving higher levels of re-deployment of non-teaching staff into teaching roles is that MoEYS is unable to reduce a substantial proportion of non-teaching staff who are deputy directors appointed through patronage, not only at the school level but also at the district and provincial levels (Geeves and Bredenberg, 2004). Hirosato and Kitamura (2009a) write that CPP and FUNCINPEC 'rival each other visibly over assignments of personnel within ministry. This structure is replicated in the education administration and finance on the provincial and district levels, leading to an increased transaction cost on education administration and finance and greatly affecting the resource allocation within the education sector' (p. 84).

This high transaction cost in Cambodia did not produce any improvements in management and supervision. The attempt made by FUNCINPEC to place supporters in state positions (which was dominated by the CPP since the fall of the Khmer Rouge

[58] This is possible as those teachers are willing to give some part of or their entire salary to the school management in return for keeping their names on the payroll. Even though teachers are poorly paid in Cambodia and Uganda, their social status is still desirable for many people, especially in rural areas.

in 1979) not only tolerates corruption practices by their officials, but also recruits incompetent officials. Robert (2002) writes, 'In a fragile and vulnerable political system resistant to power-sharing, one side struggled to enter the arena of state management without having a reasonable capacity to absorb the responsibility attached to the inherent duties' (p. 526). In Uganda, the proportion of non-teaching staff even increased, especially since the mushrooming of new districts, a consequence of the attempt to build a political client base that is based on ethnic division. Further, in some districts there are two education offices; one is responsible for urban schools falling within municipality council offices of education, and the other is for rural schools under district offices of education that employ the same number of staff.

Moreover, while there is a shortage of teachers in rural areas, there is a small surplus of teachers in urban schools (Benveniste et al., 2008). The strategy to deploy teacher-surplus from urban schools to the needy schools in rural areas has met with limited success. Teaching posts in rural areas are not very attractive, despite the introduction of additional allowance for health, transportation, and a Prime Pedagogique[59]for at least two reasons. First, the low salary makes it difficult for teachers to work in areas without support of an extended family, existing housing, or land for subsistence farming (Geeves and Bredenberg, 2004); second and more importantly, there is a lack of opportunities to earn extra income in rural schools compared to urban schools, as discussed earlier. In Uganda, in addition to this, the use of the mother-tongue language, especially in the lower primary schools, makes deployment very difficult from one surplus region to another, as Uganda consists of a variety of ethnic groups with different local dialects (Mulkeen and Cheen (Eds.), 2008).

The inability of the government to allocate teachers more equitably throughout the country affects teachers' productivity. In Cambodia, while urban teachers do not fulfill their required teaching hours, rural teachers teach more than the required teaching hours and receive overtime teaching allowances. Although this is positive, it is a manipulation of the system. Because of the wide acceptance that there is a shortage of

[59] In Cambodia, education staff is paid a basic salary, but once they begin teaching, they receive addition pay call Prime Pedagogique.

teachers in rural areas, school directors usually report overtime teaching in order to receive the allowance. For example, in 2007 one school alone received from the government about 1.5 billion riels, of which the expenditure on overtime teaching accounted for more than 50 percent. Later, it was discovered that there was no overtime teaching in that school (Kong, 2008).

Low quality education is not only due to the lack of teachers, but more importantly to a lack of qualified teachers. The majority of teachers have only a few years of formal education higher than the grade they are teaching. Worse still, even with appropriate formal education, teachers in general possess low competency. In Uganda, the majority of teachers, especially in rural areas, enter the teaching position as a last resort. Interviews and personal conversations with employees in the education sector indicate that many entered the teaching profession only when they failed to get into higher levels of education or other jobs. Most of them teach mathematics and English subjects at which they did not perform well when they were pupils (personal conversation, 7 May 2009; interview, 1 May 2009). Although, teaching positions in Cambodia are desirable and highly competitive as reflected in the large surplus of candidates taking examinations, the government fails to recruit highly qualified candidates due not only to the unattractiveness of salary but also to corruption during the examinations.

This is compounded by the low quality training at teacher training colleges. In Cambodia, a study by the World Bank (2005b) noted that current teacher education programs have limited relevance to classroom practices and student-teachers are inadequately prepared, a conclusion shared by student-teachers during a group discussion (group discussion, 30 August 2008). In Uganda, a former school director argued that teachers today are half-baked (interview, 2 August 2009). A study by Ward et al. (2006, p. 40) reveals that the curriculum at the Primary Teacher Training Center in 2005 had still not been adjusted and adapted to the new curriculum introduced in the early 2000s.

Further, teachers do not update their skills regularly because in-service training is not institutionalized. In Cambodia, despite the heavy concentration on in-service training

at the primary level, only 35 percent of teachers reported having received some form of training during the last four years, and this was mostly provided by NGOs or donors (Benveniste et al., 2008). In Uganda, in-service training is rarely organized. Even training to orient teachers on how to use new curriculum was widely considered by schools, teachers, and district education offices to have been inadequate. There also has been a lack of monitoring and follow-up on curriculum impacts and requirements (Byamugisha and Nishimura, 2008; Ward et al., 2006, p. 40). An interview with a school director indicates that it is not even compulsory that schools must send all their teachers for refreshment courses on how to teach new thematic curricula (interview, May 22, 2009). This is the vicious cycle of poor quality education.

In Uganda, Mukisa et al. (2009) argue that the unequal distribution of qualified teachers is a big challenge to improving the quality of rural education, as about half the rural teachers are unqualified and the percentage of teachers without training is high in rural areas. On the other hand, the majority of teachers with B.A. or B.S. degrees are employed in urban areas. This also holds true in Cambodia where teachers with experience of less than five years account for 52.23 and 25.27 percent of total number of teachers in remote and rural areas respectively, compared to only 13.85 - percent in urban areas (EMIS, 2007-08).

More and more qualified and experienced teachers find large urban schools to be good places for doing business to earn extra income. Anecdotal evidence shows that many teachers bribed officials and school directors so that they could be transferred to larger urban schools.[60] This situation even forces teachers to be creative in generating more income through whatever means possible to recoup their expenses (personal conversation, 17 September 2008). In Uganda, in addition to bribery, the differences in teacher quality and experience between urban and rural schools are compounded by central officers' interference. Field visits reveal that qualified and experienced teachers are placed at (large) urban schools because these officers' children and relatives study in those schools and they want to ensure their children and relatives

[60] The price depends on location; it ranges from US$500 to 1500, and even up to 5000.

receive quality educations from qualified and experienced teachers (interview 29 May 2009; personal conversation, 19 September 2008). Consequently, rural areas are always filled with inexperienced and unqualified teachers.

Lack of supplementary teaching and learning materials: In Cambodia, World Bank et al. (2005, p. 9) argue that the level of recurrent spending, especially for operational non-salary costs at the school level have been insufficient to optimize capital investments such as school construction and teacher training, which negatively affects the quality of education. Consequently, education reform since 2000 to improve the quality of education includes the decentralization of the budget whereby schools are entitled to receive grants necessary for their operation through the 'Priority Action Program' recently renamed the 'Program Budget' (PAP/BP). In Uganda, School Capitation Grants were introduced in 1997 with similar objectives. Schools are expected to spend the grants on different items selected by the central government, as seen in Table 4.2.

Table 4.2 School grant expenditure by items in Cambodia and Uganda[61]

Uganda: School capitation grant		Cambodia: PAP/BP	
Items purchased	Percentage	Items purchased	Percentage
Instructional materials for all subjects	50 percent	Teaching materials	30 percent
Co-curricula, sports, arts	30 percent	Sports, arts, crafts and agriculture	15 percent
School maintenance	15 percent	Small repairs, and school and classroom decorations.	48 percent
Administration	5 percent	Miscellaneous	7 percent

Source: World Bank et al., 2005; Bategeka et al., 2004

There has been criticism that this centrally-set policy lacks flexibility as every part of the country and each school has its own unique problems. Therefore, a grant is unable to address an individual school's needs (Liz and Rosemary, 2005). But if this were so, despite millions of dollars having been spent, why are teaching materials — which schools must purchase in accordance with the guidelines, see Table 4.2 — still in short supply? For instance, from the available data, the ratio of textbooks to pupils in primary school is declining in all grades, despite the fact that the Ministry of Education in both countries declared a 1:1 pupil-textbook ratio policy. Further, despite policy requirements for each school to have a library and a laboratory, many schools still do not. Of the schools that have a library and a laboratory, most are too small and

[61] In principle, grants are provided to schools according to enrollment numbers. In Uganda and Cambodia, the governments provide Ushs6,550 ($3.25) and 11,434 Riels ($3) per primary pupil, respectively. This system seems to create inequitable distribution of funds in that schools with large enrollments receive more funds than schools with small enrollments while they support the same basic administration. This system later was replaced by a threshold fund for schools to run basic administrations. Per annum, each school in Uganda receives Ush900,000 ($450) with additional Ush3,464 ($1.8) per pupil compared to Cambodia 500,000 riels ($250) with an additional 6,000 riels ($1.5) per pupil (Bray and Seng 2005; Bategeka, et al., 2004). In Uganda, recently, as a result of dropping the priority on primary education, grants were further reduced and budget allocations were no longer available to purchase textbooks.

lack adequate shelves, study space, relevant equipment, and reading materials, especially in rural areas.[62]

Why is there a lack of supplementary teaching and learning materials?

The idea of taking implementation seriously is that, 'Even if the state elites make a correct diagnosis of the kind of intervention that is indicated and has the political will and command over material resources necessary to undertake the action, they may not be able to carry out, simply because the required bureaucratic machinery cannot be created in time' (Rueschemeyer and Evans, 1993, p. 51). This section will examine this issue.

The delay of funds and their leakage: Studies on the effectiveness of grants provided to schools to improve the quality of education in Cambodia and Uganda reveal that there is a delay of fund release — as much as 90 days and in some extreme cases up to a year — which makes it difficult for school management to execute their plans effectively. Studies also note that the delay of funds is due to the insufficient technical capacity at the sub-national level to cope with a new budgetary system (Ward et al., 2006; World Bank, 2005c; UNDP, 2007, p. 22). Despite recent reforms aimed at simplifying the procedures, the situation remains the same. School visits during fieldwork indicate that the release of grant money is still delayed between 3-6 months. In Uganda, a school director complains 'How can we keep pupils in school if we do not have money?' (Ahimbisibwe, 2009). In Uganda, some people claim that the delay is due to a lack of funds because educational expansion was motivated by political interests that never take into account the financial constraints. However, there is a report that more than Ush2.5 billion ($1.25 million) in funds for the education sector was overdrawn from the Bank of Uganda account under vague circumstances (Sunday Monitor, 2010).

[62] It is also important to note that although some schools receive book donations from outsiders, the majority of these extra reading materials are not helpful for pupils. Fieldwork in both countries reveals that these books are either irrelevant or outdated. Cambodia and Uganda are places where outdated and irrelevant books are given in the name of donation.

Because of non-transparent financial transactions, Antonowicz et al. (2010) argue that the delay in distributing funds is not a matter of administrative inefficiency or lack of funds, rather it is an issue of corruption. This is reflected in the fact that schools never receive the total amount they are entitled to. In Cambodia, 64 percent of school directors reported having paid a facilitation fee (informal cash payment) from the officially allocated funds to the district education officials in return for the disbursement of funds, and this practice reaches the central level (World Bank, 2005c).

In Uganda, one study found that only two percent of the money released by the Ministry of Finance for non-salary primary school expenditures actually reached the schools in 1991, and even in 1995 the ratio was as low as 20 percent (Reinikka, 2001; Reinikka and Smith, 2004). In the late 1990s, a media campaign against corruption was introduced; since then there was a report that the percentage of funds reaching schools increased steadily, over 90 percent in 2006 (Hallack and Poisson, 2007). However, the level of leakage has increased recently. School management staff in two districts during field visits reported that funds reached their schools only between 50-70 percent of the time (interview, 1 May 2009; 29 May 2009). This is because the information posting and monitoring campaign has waned recently. A study by Paul Bubbaral (2007) claims that when viewed as a monetary amount rather than a percentage of entitlements, corruption did not fall as dramatically between 1995-2001. Using his calculations, the nominal amount of funds that leaked fell by less than a spectacular 12 percent over 6 years.

The availability of funds and their use: Despite the continuation in fund leakage, recent public expenditure tracking surveys in both countries found that the levels and amounts of funds reaching schools are improving. The question then is why is the availability of teaching materials declining? As a teacher claimed,

In my school, all teachers including myself never follow the rules that we have learned in the Teacher Training Center due to a lack of teaching materials. I have taught here for three years, but I have never been given any teaching materials, so my teaching is not effective. I have argued with the inspector who asked me why I do not use the teaching materials. I asked him how can I have those materials if the school

does not provide them to me. So this is a matter of school management which is beyond my responsibility. (interview 8 September 2008)

These claims were shared in many studies that indicate the issue of management at the school level is crucial for the success of educational reform, especially in quality improvement. To some extent, schools are self-contained systems, and different schools may respond to a given set of inputs in different ways (Nannyonjo, 2007; Adams, 2002). In their study, Hanushek and Kimbo (2000) raise the questions that it is not only a problem of how much funding a school has in order to see its impact on the quality of education, but what are the funds being spent on, and how efficiently and effectively are the funds used?

This study found that grants are regularly diverted from their intended uses. In Uganda, schools diverted funds intended for purchase of scholastic materials to administrative work, especially for transportation (Bategeka et al., 2004, p. 94). In Cambodia, a conversation with a teacher responsible for compiling school receipts, indicated that about 40 percent of school budget received from the government is spent on the school director traveling to clarify the incorrectness of the receipts and documents from district and provincial departments of education. He further points out that this travel is necessary only for those schools unwilling to pay kickbacks to district and provincial officers (personal conversation, 2 December 2008.). And what the remaining funds are used for remains a secret. In Uganda, a report stated that school directors who enjoy high status in communities continued to misappropriate UPE funds, often in collaboration with district officials (Ward et al., 2006, p. 108). This is supported by the fact that only a small number of schools fully complied with fund accounting requirements, including the use of vouchers, availability of a cash book, utilization of effective methods for bookkeeping and regular reports on the uses of funds (Ward et al., 2006; World Bank et al., 2005; Antonowicz et al., 2010).

However, school management and district and provincial officers are not operating in a vacuum, especially in public schools in Cambodia and Uganda where funds are coming from the central government. In fact, technical staff in the education sector in Uganda considered good leadership and effective supervision mechanisms essential to

effective accountability (Mugumya et al., 2008). However, as presented earlier, the inspections and supervision by the central government are weak. Even when inspections were carried out, they were just symbolic. In Cambodia, the World Bank (2005b, p. xi) argues that monitoring activities have a limited effect because most school inspections do not follow standard procedures and, more importantly, do not result in any official report being issued. Moreover, inspections are carried out by MoEYS officials, thus external oversight is not a regular feature of the system.

In this neopatrimonial arrangement, the patrons protect their clients through ceremonial technical performances. This works against the ideal of effective organization. Meyer and Rowan (1977) write, 'Ideally, organizations built around efficiency attempt to maintain close alignments between structures and activities. Conformity is enforced through inspection, output quality is continuously monitored, the efficiency units are evaluated, and various goals are unified and coordinated' (pp. 356-357). But this oversight is absent in both countries. For example, in Uganda a school director in the Jinja district expressed disappointment with the inspection process. According to her, inspection does not help much because the inspectors do not have the capacity to diagnose the illness. According to the process, schools are supposed to receive school improvement plans, but her school has never received a plan after any inspections (interview, 30 July 2009).

Often inspections are an opportunity for officials at higher levels to extract money from schools, rather than look for ways to improve schools' performances. Interviews and personal conversations with school directors in both countries reveal that only large schools are inspected favorably, not because the inspection aims to improve the situation, but because there is a lot of money to be shared. In Cambodia, a school director pointed out that,

Before, we asked pupils and parents to contribute to purchasing teaching materials. Because of their contributions, we have to be accountable. Now we get money from the Ministry of Education, and we turn our accountability away from pupils and parents towards the Ministry, but the Ministry does not need our accountability; if we

are accountable in using money, they will get nothing (personal conversation 17 September 2008; personal conversation several occasions).

It is important to note that the demand for contributions to political party campaigns and development projects from high-ranking officers at the central and ruling-elites levels force officials to find ways to extract money by whatever means possible. In this sense, in Cambodia and Uganda corruption in the education sectors in general and in schools in particular is a result of broader political systems, especially in light of their political competition based on patronage and vote buying rather than on performance. This is evidenced by the fact that before the elections politicians made promises or gave gifts to people.

Lack of knowledge on how funds should be used: Finally, the lack of supplementary teaching and learning materials also result from the misuse of funds; scarce resources are spent on what is unnecessary. In Cambodia, a lot of resources are unwisely used, such as building huge fences and expensive gates. The situation became extreme when recently such misuse of funds was regarded as the only standard for a school management competition. Some schools attempted to build fences and gates before having proper classrooms, teaching and learning materials, libraries, laboratories, or toilets. Pictures 4.5 and 4.6 illustrate the Cambodian reality.

Picture 4.5 An incomplete school in Pursat province, Cambodia

Picture 4.6 School in Kampong Cham province, Cambodia

Picture 4.5 is an incomplete school with only three classrooms, but has five classes and no library, laboratory, or toilets, and a shortage of teaching materials. Picture 4.6 is another school with a huge fence and expensive gate.[63] When asked what aspect of her school she would like to develop, the school director (Picture 4.5) listed a fence as one of her priority projects (personal conversation during a school visit, 2 February 2009). This is because, on the one hand, it is a visible sign of school improvement, and, on the other hand, school directors lack technical know-how to improve the quality of education because of their own low level of formal education, as discussed earlier. In Uganda, studies underscore the need for channeling resources to what will improve pupils' learning opportunities (Kasirye, 2009, pp. 2-3; Nannyonjo, 2007). It is important to note that despite the lack of teaching materials and necessary furniture in primary schools, the government continued to budget for 65 percent of the total boarding expenses in secondary schools (Kajubi, 1991). Further, in Uganda secondary schools are underutilized. Pupil-classroom ratios have declined from 49:1 in 2005 to 36:1 in 2008, while there is a shortage of classrooms in primary schools, as presented above (UBOS, 2009b). This signifies that the Ugandan education system neglects primary schools, which are the foundation of the entire education system.

[63] When one travels throughout Cambodia, one often sees this type of school that lacks the necessary materials for effective teaching.

Other types of misuse of funds can be found in the national policy on ICT in education. For example, one passage in the policy reads, 'The challenge for Uganda is to step up her efforts in building information and communication technologies, especially in the rural areas … It is only when every village has access to communication technologies that the local populace will be enthusiastic to participate, and eventually gain a competitive edge in the job world' (The New Vision, 2009). Consequently, in Uganda as well as in Cambodia, much of the school budgets is earmarked to buy expensive equipment such as computers, TVs, DVD players, and LCD projectors, and to organize training workshops on how to use this equipment. Interestingly, fieldwork notes that most schools in both countries have no electricity to use this equipment. Further, this ICT knowledge has no practical application in rural areas. Moreover, this programme does not address schools' needs, such as housing for teachers and teaching materials.

In Uganda, a report by MoFPED (1999) reveals that communities are aware of the lack of accountability and transparency in school administration, particularly regarding budgets. But they do not have the power to voice their concerns because of the lack of checks and balances of power between schools and parents. Although Ugandan school management committees were introduced, they are predominantly dominated by appointed members from central and local governments in which parents play a marginal role. Out of its nine members, only two are appointed by parents, three by the central government through the Ministry of Education, and four by the district council's education committee through a process where members are proposed by school directors who, in turn, are mostly local elites. In Cambodia, although community participation is strong, Pellini (2007) and Shoraku (2008) found that this participation is only in the form of contributions, not in the form of monitoring and supervising school management. Cambodian School Support Committees, which consist of 10 members, generally do not include parents. Usually, a committee consists of a commune chief, village heads, other elders in the community, and a school director who usually holds a position of committee leadership such as secretary and accountant. Therefore, the use of grant funds depends largely on the school management, especially school directors. Good school directors,

whether in rural or urban settings, use grants to deliver better quality educations, in contrast to those who want only to enrich themselves.

IV.4 Cambodia has a slightly better quality of education than Uganda

Despite many similar weaknesses found within the education systems in both countries, Cambodia's quality of education appears to be slightly improved, while Uganda's has stagnated, as presented above. Why is Cambodia able to perform slightly better than Uganda?

IV.4.1 Cambodia uses its instruction hours relatively more effectively than Uganda

Although both countries experience a significant loss of instruction hours, as presented earlier, the loss in Cambodia is lower, ranging between 13 and 20.13 percent, compared to about 33.30 percent in Uganda (McLaughlin and Sprechman, 1999; MoEYS, 2008c; Ward et al., 2006; Musinguzi, 2010). The lower loss of instruction hours in Cambodia than in Uganda is partly due to its lower teacher absenteeism. In Cambodia, the estimated rate of primary teacher absenteeism is 7.1 percent, which is relatively lower than in Uganda, at 30 percent (Ward et al., 2006, p. 114; Benveniste et al., 2008). Other studies in Uganda suggest that teacher absenteeism might be even higher because only about 20 percent of primary teachers were actually found to be in the classroom (MoFPED, 2007; Vaughau and Izama, 2009; Papique, 2010).

Why is the level of teacher absenteeism lower in Cambodia than in Uganda? Despite similar challenges, as presented above, Uganda faces more challenges than Cambodia. First, the HIV/AIDS epidemic in Uganda also hit the country's community of educators, leaving 38 percent of its serving teaches infected by HIV/AIDS (Muhanga, 2005). Second, the lack of teacher accommodations in Uganda is more severe than in Cambodia. This is due partly to a different process in recruitment and placement of student-teachers. In Cambodia, after training, student-teachers are automatically posted by the Ministry of Education through their training colleges. The policy priority is that teachers are posted at schools in or near their hometown villages (Benveniste et al. 2008). Such placement patterns solve the problem of

accommodations as they can stay with their families and relatives. In contrast, in Uganda, teachers are recruited from anywhere through public announcements, and they expect accommodations from the government through the schools where they teach. Because of budget constraints, shortages of accommodations for teachers remain largely unsolved; It has been reported that 71 percent of teachers lack accommodations (Policy and Operations Evaluation Department, 2008).

Finally, there seems to be slight differences in teachers' motivations and commitments to teach in Cambodia and Uganda, which leads to different degrees of teacher absenteeism. In Cambodia, although teachers complain a great deal about the working environment and salary, a study found the most common reasons given by teachers for wanting to go into teaching are a strong interest in the job, a desire to help the country by improving education, and an enjoyment of working with children. As a result, Cambodian teachers consider the achievement of learners as their main motivation; as one teacher claims, 'The proudest time for me was when one of my pupils got the top award for physics in the whole country and received an award from [His Excellency] Sok An, Deputy Prime Minister' (Nock and Bishop (Eds.), 2008, p. 13). Another study concludes that teachers in Cambodia are largely a dedicated cadre that actively pursues education as a life career, which is reflected in a low turnover rate. An overwhelming majority of teachers (96 percent) reported that teaching was their top choice as a profession (Benveniste et al., 2008).

In contrast, the majority of Ugandan teachers enter the teaching position as a last resort and the rate of turnover is slightly higher compared to Cambodia, as discussed earlier. Consequently, they put their own comfort before pupil achievement. Only a small percentage of teachers (1.9 percent) consider learners' achievements to be a source of motivation. Others seem to recognize and appreciate the more tangible type of motivation, such as money and land (UNEB, 1999). A school annual meeting also reported that the motivation of staff increases because of the general increase in Parent Teacher Association allowances (Mbarara Municipal School, 2008).

This is also reflected in the fact that when critically assessing teacher salaries, the most important part of teacher welfare, reveals that Ugandan teacher salaries are not

only higher than Cambodia's in absolute terms, but the gap between salary and living cost is also smaller.[64] Further, interviews with school management during field visits in Uganda reveal that teachers receive substantial additional support in cash from schools, such as a salary supplement, transportation, food, electricity, and water.[65] This means that, relatively, the gap between living cost and salary is resolved. Furthermore, school visits during the fieldwork revealed that in some cases, despite the availability of accommodations at school, teachers still preferred to stay at the district town. Also, a local newspaper reported that, 'A group of angry parents … hold out teachers of Kinotima Primary School in Paicho Sub-county, Gulu district to task to explain why they continually skip lessons … The parents said they endeavoured to build huts for the teachers close to school, but some teachers still choose to commute from Gulu town about 30 kilometers from away' (Aber, 2006).

IV.4.2 Cambodia has a slightly better quality teaching than Uganda

The slightly better quality education in Cambodia than Uganda is also due to its slightly better quality teaching. Classroom observations in both countries reveal that Cambodian teachers devoted less time to dictation and spent more time on questions-answers and explanations, compared to their Ugandan counterparts. In Cambodia, there is a report that of the 27 percent of teachers using teaching aid materials and textbooks in the classroom, about half of them had lesson plans readily available on the day of the unannounced classroom visits (MoEYS, 2006b). This situation is much better compared to Uganda. Although it is not a national survey, classroom observations during field visits in Uganda showed that more than 70 percent of a session was devoted to dictation, even in grade 12, with limited teaching materials and, in most cases, no teaching materials at all. A study by Harriet Nannyonjo (2007, p. 29) revealed that teachers hardly used textbooks during their teaching. Even teachers who brought textbooks to the class did not refer to them. The most common use of textbooks by teachers was to extract and copy work on the blackboard for pupils. In those observed classes made by the author, teachers did not have lesson

[64] An interview with teachers about their necessary expenditures reveals that the gap between monthly salaries and living costs in Uganda is US$9 compared to US$30 in Cambodia.

[65] This additional support comes from the Teacher Parent Association and other school income such as school fees (interview, 30 April 30 2009; 29 May 2009; 11 June 2009).

plans, an observation shared by a study that found that teachers are negligent when it comes to preparing work schemes (Muhumuza, 2004).

The slightly better quality teaching in Cambodia than Uganda results from their different education systems. The centralized plan system of education in Cambodia contributes to slightly better qualified teachers and more availability of teaching materials, compared to the decentralized system of education in Uganda.

Cambodia has slightly more qualified teachers than Uganda

While only 68 percent of the Cambodian teaching staff in primary schools has lower secondary education as their formal qualification, in Uganda, this figure is 85.59 percent. Overall, Cambodian teachers are more prepared to teach than their Ugandan counterparts, as seen in the lower percentage of teachers without pedagogical training. In Cambodia, in 2008 only 1.3 percent of the teaching staff were without pedagogical training, compared to 11 percent in Uganda in 2006 (EMIS, 2007-08; UBOS, 2009b). By 2008, 25 percent of primary teachers in Uganda did not meet the professional requirements (Vaughan and Izama, 2009). This is due to two factors; first is the different nature of education reforms, and second is the different teacher recruitment processes in both countries.

In both countries, the unqualified and untrained teachers who were recruited in the 1980s underwent a massive in-service training in the early 1990s, thus the percentage of teachers without pedagogical training was reduced significantly by the late 1990s. The difference in percentage of unqualified and untrained teachers in both countries began to emerge in the late 1990s when the reform to expand education coverage was implemented. In Cambodia, the reform to expand educational coverage was gradual and started with a relatively high enrollment amidst a decline in the population growth rate. Such a pattern of reform did not lead to a rushed expansion of teacher recruitment. Consequently, the remaining unqualified teachers who retired were replaced by young teachers who went through a gradual development at teacher training colleges since the late 1990s. This also resulted from a centrally planned education system. In Cambodia, teachers are not recruited by local governments but by the central government, as planned through the teacher training centers. The

number of student-teachers is selected according to government public service reforms, which sets quotas for each ministry, and thereafter student-teachers are automatically posted after their training. In this sense, there is no waste of resources, and schools are certain to be assigned teachers who underwent proper pedagogical training.

In contrast, in Uganda the sudden introduction of UPE in 1997 led to a huge increase in enrollment that immediately required a large number of teachers. This was compounded by the high population growth that also demanded more teachers. Consequently, many unqualified and untrained teachers were recruited because the reform was not strategically planned. The Ugandan central government neither plans nor recruits student-teachers. The teacher training colleges admit student-teachers according to their capacity and their only role is training, not job placement after graduation, as is the case in Cambodia. Primary school teacher recruitment in Uganda is decentralized. Local governments publicly announce the vacant posts and recruit people from every corner of the country. In this sense, there is no formal cooperation between teacher-recruiters and teacher-providers, both in terms of quantity and quality. This is not only ineffective but also inefficient. For example, there were 500 teaching posts advertised for Kitgum district, but only 210 applications were submitted, and only 180 were deemed suitable (Mukisa et al., 2009).

In other cases, the failure to improve the untrained teachers in Uganda is not only a result of a lack of candidates, but also a failure to enforce compliance to policies and guidelines, a consequence of corruption during the recruitment process, as discussed earlier. Local government recruits unqualified teachers and even teachers with fake diplomas. For example, in 2009 in just one district out of the 1,780 teachers, only 1,205 had valid documents. The report reveals that over 600 teachers held forged academic documents and appointment letters (Manafwa, 2009). Further, rather than compromise this situation in order to solve the problem of the shortage of teachers, especially in rural areas, Uganda scrutinized teachers' qualifications, which resulted in expelling a number of teachers with forged academic documents. This made the situation worse. For instance, in 2005 the Ministry of Public Service expunged 586 teachers in the Arua district from the payroll for lack of academic qualifications.

However, there was no contingency plan to fill the vacancies, so the school director had to borrow teachers from other schools (The New Vision, 2005).

Cambodia has slightly more teaching and learning materials than Uganda

As discussed in Chapter III, Cambodia was able to invest more in its physical infrastructure than Uganda. Consequently, in Cambodia between 1998-99 and 2007-08, classrooms without roofs, blackboards, and walls were reduced from 15 to 11.66 percent (EMIS, 1998-99; 2007-08). While in Uganda, the physical infrastructure is deteriorating. Before the UPE, 10 percent of rural schools and 70 percent of urban schools had enough chairs, but after UPE none of the rural schools did and only 31 percent of urban schools had sufficient chairs (UNEB, 2003). Overall, 62.7 percent of respondents said that the school facilities were inadequate (UBOS and MoPS, 2009, p. 34). Consequently, the most common scene in Ugandan schools, especially in rural areas, is more than 100 pupils packed into one classroom and sitting on floors, as seen in pictures 4.3 and 4.4. An empirical study in Uganda finds out that an increasing number of pupils shared one desk, and not having a desk at all affects pupils' performances. Clearly, such an environment, the study concludes, is not conducive to learning and leads to time wasted as pupils try to find a comfortable position (Nannyonjo, 2007).

Further, Cambodia has better teaching and learning materials, such as textbooks. In Cambodia, in 2000-2001, immediately after the reform, the pupil-textbook ratio was 1:1; however, by 2005-06 the ratio declined to 1.25:1 (MOEYS, 2007). The shortage of textbooks in Uganda is more severe. Immediately after the reform, in 1999, the pupil-textbook ratio was 6:1 and improved to 3:1 by 2003 (UNDP, 2003), but recently the situation began deteriorating. A study reported that the pupil-textbook ratio, even in the core subjects of mathematics and English, is rarely better than 5:1 and is frequently 10:1, and in some cases 20:1 or even worse (Ward et al., 2006).[66]

[66] Interestingly, not only does Cambodia have a better pupil-textbook ratio than Uganda, Cambodian pupils benefit from the availability of textbooks, while Ugandan counterparts do not. In Cambodia, as far as textbooks are concerned, a policy stipulates that textbooks must be accessible to pupils. As a result, they are allowed to borrow the books to use for the whole school year and return them at the end of the school year. In Uganda, there is no such policy. School visits during the fieldwork revealed that

The increased availability of textbooks in Cambodia is due to its central distribution system. Textbooks are distributed to schools through their provincial departments and district offices on the basis of reported needs. The borrowed textbooks are required to be returned and are subsequently redistributed to pupils. The issues in Cambodia are how to maintain and care for the distributed textbooks. In contrast, in Uganda textbooks are purchased by schools through grants provided by the central government. However, as discussed earlier, budgets did not reach intended targets because the money was diverted to other uses. A World Bank study (2008a) found that none of the schools surveyed in Uganda had allocated textbook budgets sufficient to reach even the minimum level of textbook requirements. Recently, the plan to improve the quality of primary education in its second ESIP 2004-2015 was changed in the middle of implementation when the policy priority on primary education was replaced by a focus on secondary and higher education, as discussed in Chapter II; consequently, there was a decrease of capitation grants from Ush6000 in 1998 to 3000 in 2008, and the textbook budget was no longer available as it had been in the previous few years (Hedger et al., 2010).

IV.5 Concluding remarks

Until recently, quality education in Cambodia and Uganda as measured in terms of pupil proficiency in mathematics and literacy was not only low, but also unequal because their urban schools perform better than their rural counterparts. Some people argue that there is a trade-off between quality improvements and quantity expansions, especially in poor developing countries where resources and efforts are mobilized to expand access to education (Throsby and Gannicott, 1990; Mingat and Tan 1986). However, as demonstrated throughout this chapter, low quality education in Cambodia and Uganda is hardly a matter of inadequate resources, but is the result of inefficient and ineffective uses of resources because of poor management, supervision, and inspection, especially from the central levels.

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none of the schools allowed pupils to borrow the books, even for use in the classroom. Pupils could borrow books only in the library. Unfortunately, library operating hours overlapped with class hours, restricting pupils' access to textbooks.

The neopatrimonial politics that manifested in the forms of corruption and political interest to attract and retain loyalty from teachers, schools directors, and civil servants in general do not provide any incentive for the central government to establish an effective management, supervision, and inspection system. This situation led to significant loss of instruction hours because of absenteeism among teachers and school directors and poor quality of teaching because of the lack of (qualified) teachers and teaching materials. The fact that urban pupils perform better than their rural counterparts is hardly a matter of better management, supervision and inspection, but teachers and school directors respond to the incentive provided by urban parents through school fees and informal fees such as selling lesson notes and private tutoring.

The fact that there is no trade-off between quantity expansion and quality improvement is reflected in the improved quality of education in Cambodia, albeit slowly. The problem is how to design strategies to effectively and efficiently use the available resources. This comparative case study between Cambodia and Uganda reveals that where neopatrimonial politics are embedded with a centralized mode of governance, resources can be used relatively effectively and efficiently compared to when politics are embedded with the decentralized mode of governance. This is reflected in Cambodia's relatively efficient and effective use of the instruction hours and relatively better quality teaching that led to a relatively better quality education, compared to Uganda's.

The centralized and planned system of teacher recruitment and placement in Cambodia allows it to solve teachers' accommodation problems, which led to lower teacher absenteeism and guaranteed teacher qualifications, which has led to better quality teaching, while the decentralized and unplanned system of teacher recruitment in Uganda has led to higher teacher absenteeism because the government was unable to provide sufficient accommodations for teachers, and a lack of teaching qualifications because corruption in the recruitment process significantly impacts the quality of teaching.

The centralized system of textbook distribution in Cambodia also led to more availability of textbooks at the school level compared to the decentralized system of budget allocation to schools to purchase textbooks of their own. Because of corruption and other factors, textbooks were not purchased by schools, which negatively impacted the quality of learning. It is important to note that the better quality of education in Cambodia than in Uganda is also a result of different teacher motivation and commitment in both countries. While Cambodian teachers seem to put the achievement of pupils as their main motivation to teach, Ugandan teachers seem to put their own comfort above pupil achievement.

CHAPTER V
EDUCATIONAL OUTCOMES: TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING AND HIGHER EDUCATION

It is the division of labour (through education)
that a society can prosper and be sustained.
Adam Smith, 'The wealth of nations'

V.1 Introduction

Education reforms in Cambodia and Uganda, aiming to contribute to the development of their countries, not only focus on expanding the access and raising the quality of education in terms of literacy and numeracy skills, as discussed in Chapters III and IV, but also the provision of skilled labour. This role was reinforced in their national development plans, in which education was considered the key to promoting private-led economic growth, especially in the industrial sector, and to reduce poverty through productivity improvement in rural areas. To achieve these objectives, a balance across a range of skilled workers is needed.

A balance here does not mean equal treatment among different levels of education and training institutes, but rather that education responds to the needs of the respective labour markets and levels of economic development. In the context of developing countries such as Cambodia and Uganda, as discussed in the theoretical framework in Chapter I, there is a prioritized need for a large labour force with practical skills (technical and vocational), followed by a highly skilled workforce in science, engineering, manufacturing, construction, and technology. Being unable to educate the population results in shortages of relevant skilled labour and a waste of effort and resources.

In Cambodia and Uganda, this diverse pool of skilled labour is trained at different levels of education and training institutes. Therefore, this chapter will examine and compare how different levels of education and training institutes in Cambodia and Uganda provide a balance of diverse skilled labour to respond to local labour market needs across different levels of economic development. This chapter will be divided into four sections. The first section will examine the structure of the local labour market and economy and its implications for needed skilled labour. The second section will examine the practical skill provision in terms of technical and vocational

training and factors that affect such provision. The third section will examine the situation of higher educational provision in science, engineering, manufacturing, construction, and technology, and factors that affect such provision. The final section is the concluding remarks.

V.2 Structure of the Ugandan and Cambodian labour markets and economies: Implications for skill requirements

Cambodia and Uganda are situated in quite different geographical settings. While Cambodia has a coastline with a large central plain and is an average of 360 meters above sea level, Uganda is a landlocked country situated on the great African plateau at an average of 1200 meters above sea level. However, they are both considered rich in unexplored and unexploited mineral resources, including significant deposits petroleum, and they are considered to be countries blessed with fertile soil for agriculture.

Despite the difference in population size and ethnic composition (the population in Cambodia is about 14 million and in Uganda is about 30 million, and Cambodia is predominantly one ethnic group — Khmer — which accounts for about 90 percent of the population, while Uganda is a multi-ethnic country in which more than 10 ethnic groups have more or less an equal share of the total population), the majority of the two countries' populations are relatively young, and therefore have a high labour-force participation rate.[67] Between 2006-2009, the youth labour force participation rate in Cambodia and Uganda was 79 percent and 85 percent respectively. Further, the majorities of their populations reside in rural areas and are involved mainly in agriculture (as seen in Table 5.1). Their employment status also shares a similar pattern in which the percentage of unpaid family workers is very high, accounting for about 41 percent of the total employed workers.

[67] The labor force participation rate is the proportion of the population aged 15 and older that is economically active.

Table 5.1 % of the population by regions and % of labour force by sectors in Cambodia and Uganda

	% of population by regions				% of labour force by sectors					
	Rural		Urban		Agriculture		Industry		Service	
	1993	2009	1993	2009						
Cambodia	86	78	14	22	1993-94	2004	1993-94	2004	1993-94	2004
					75	60.5	4.5	12.3	20.5	25.5
Uganda	89	87	11	13	1992	2005-06	1992	2005-06	1992	2005-06
					80	73.3	3.26	4.2	16.6	22.5

Source: Lundström and Ronnås 2006a, 2006b; ADB 2009, World Bank data, retrieved on 16 June 2011, from http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS/countries

Although the Cambodian economic structure is moving away from agriculture towards the industry sector, its industry is still small, employing only 12.3 percent of the total labour force. Further, industry has a narrow base dominated by low tech industries such as the garment sub-sector that employs almost 80 percent of the labour force in the industry sector. In Uganda, during the last decades, there has been little change in economic structure. The size of the industry sector is very small, employing only 4.2 percent of the total labour force in 2006, and construction employed the majority of the labour force in the industry sector.

During the last decades, the service sectors in Uganda and Cambodia have grown, but still employ roughly over 20 percent of the total labour force. In Uganda, the growth is mainly due to the increase in the number of civil servants, especially among teachers, a product of the implementation of UPE and the proliferation of the number of districts. Between 2002 and 2008, the number of civil servants in Uganda increased by 34.31 percent, from 204,182 to 274,237. The increase in public service workers is not in line with public administrative reforms and also is contrary to its economic policies, which considered the private sector as the main engine of growth. However, the service sector growth in Cambodia is mainly the result of the improvement in

tourist-related businesses. The proportion of paid employees in hotels and restaurants and in social, community, and personal services rose about three-fold (from 1.2 percent to 3.9 percent, and from 6.6 percent to 17 percent, respectively) while those employed in civil service declined (World Bank, 2007a, p. 50).

Therefore, policies aimed at linking education and training to the needs of the local labour market and economy in both countries must address the dualistic nature of their economies. On the one hand, there is a rapidly growing urban economy — an emergence of low-tech industry and expanding service sectors, albeit with a narrow base. On the other hand, there is a large rural economy dominated by the agriculture sector, which needs improvement and modernization, as the majority of the agriculture labour force lives at the subsistence level. This economic structure signifies that there is a low demand for skilled workers, especially those with high skills.

However, certain types of skills are necessary to the economies of the two countries. As discussed in the theoretical framework in Chapter I, for developing countries such as Cambodia and Uganda at the early stages of development where agricultural is predominant and industry is still in its infancy, but compounded by the increasing importance of technological innovation and adaptation in economic structural transformation and development processes, the skilled labour most needed includes a large mid-skilled labour force in the technical and vocational fields and a small highly-skilled labour force in science, engineering, manufacturing, construction, and technology with higher education backgrounds rather than general secondary educations, and humanities, art, social sciences, and business with higher education backgrounds (World Bank, 2008b, p. 20). Therefore, the following section will examine the provision of these skilled workers in Cambodia and Uganda.

V.3 Technical and vocational skills formation in Cambodia and Uganda

Immediately after the end of their civil wars, studies on the roles of education in the development of Cambodia and Uganda have similarly concluded that the entire education systems are unable to produce sufficient skilled labour to meet the needs of labour markets and complete the task of rehabilitating and reconstructing these two

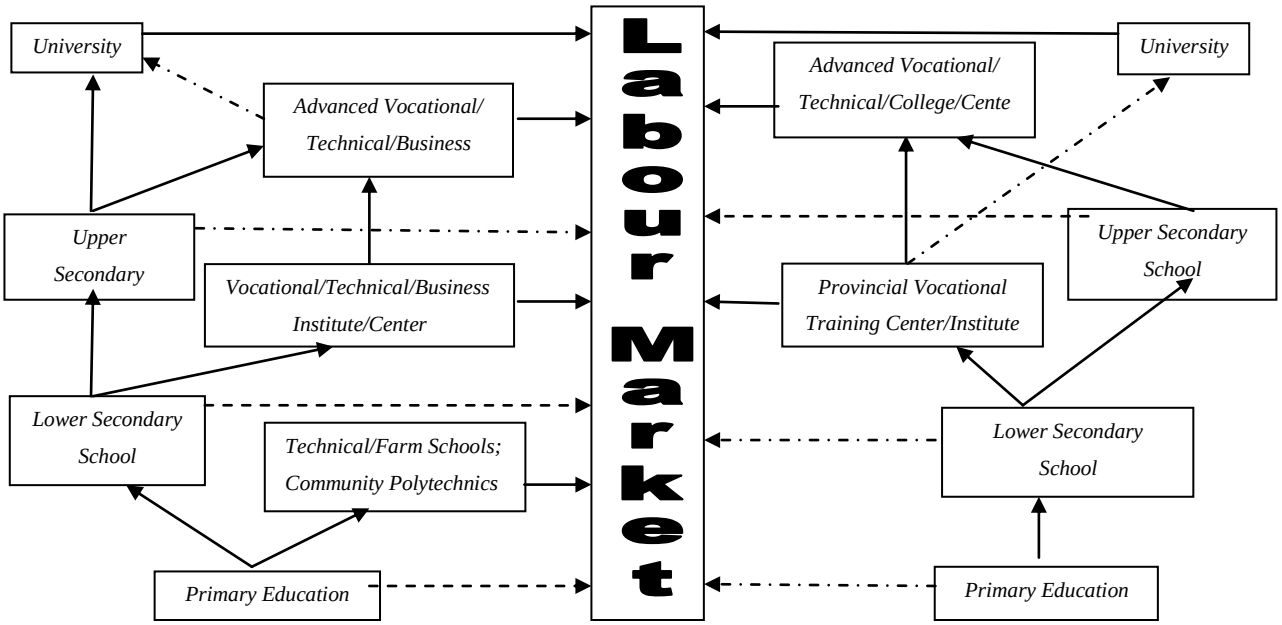
devastated countries.[68] First, their general education curricula lack a focus on technical and vocational skills. In Uganda, the task of general education was intended to prepare students for higher education to take up managerial positions, especially in the government sector. Therefore, the system purposely promoted academic subjects rather than technical and vocational skills. Those who were unable to continue their higher education were therefore not able to actively participate in economic activities and remained largely underemployed or unemployed, as they had not acquired any marketable or productive skills (Development Consultants International Limited, 2001, p. 4). In Cambodia, additional tasks were added to the general education curriculum during the 1980s and early 1990s to indoctrinate students with socialist-communist ideology, which are no longer relevant for the situation after the transition to a democratic ideology and a market economy.

Second, the technical and vocational education and training institutes in Uganda and Cambodia, which annually produce only about 5,000 and 2,000 graduates respectively, cannot satisfy the need for skilled labour (MoES, 1990; ADB, 1997). Based on this analysis, the studies recommend that for education to better contribute to development, education must equip students with vocational and technical skills. The government of both countries planned to adopt this policy. Immediately, in the late 1980s and early 1990s in Uganda and Cambodia respectively, taskforces were set up to develop new curriculums and strategies to improve the TVET sub-sector.

In this sense, formal technical and vocational skill formation in both countries — a process where young people are prepared to enter the labour market — can be acquired through two channels. The first is through general education, as technical and vocational skills are mainstreamed into the general education curriculum, and, second, more preferred by policy makers in both countries, is through the technical and vocational route in specialized training institutes, as seen in Figure 5.1.

[68] These include the Education Policy Review Commission report (1989), Manpower survey by Manpower Planning Department (1989), and the Education White Paper (1992) in Uganda, and in Cambodia the Asian Development Bank education sector strategic analysis in early 1990s.

Figure 5.1 Ugandan and Cambodian Education System



Ugandan Education *Cambodia Education System*

Intended by the policy maker

Not intended by the policy maker

V.3.1 Skill provision through general education

In Uganda, as discussed in Chapter II, the low expenditure on education in general, and the inability of government to shift its historical emphasis and heavy investment in higher education immediately after the end of the civil war, hindered the reform process to improve technical and vocational skill provisions in general education. Only the primary school curriculum was reviewed, and this work proceeded very slowly. It took more than a decade before the new curriculum was introduced in the early 2000s. Consequently, classroom practice still followed the old curriculum and continued to produce graduates with little vocational or technical skills to improve their living standards as well as the economy as a whole.

The introduction of a sector-wide approach in Uganda in 1998 and the increase of budget to the education sector as presented in Chapter II brought about opportunities for change. In the early 2000s, the new Ugandan primary curriculum, which included

'Integrated Production Skills', was introduced; however, the new curriculum has never been put into practice in schools. Consequently, the traditional emphasis on academic subjects still dominates Ugandan classrooms. Rather than trying to analyse why this new curriculum was not properly implemented, the MoES, with support from the donor community, introduced another new curriculum called 'thematic curriculum' for primary schools in 2007 and in 2009, and a new secondary school curriculum was also introduced. The new curriculums claimed to include local life skills and skill improvement, which the MoES believes are central to reducing poverty and speeding up the development and industrialization of the country by creating more employability for the graduates and making them more productive.

Although it is too early to evaluate the impact of the new curriculums, there is widespread recognition that practical/vocational education still does not receive priority attention in classroom practice (Uganda National Commission for African Peer Review Mechanism, 2007; Komakech, 2009). A recent assessment found that the core issues in teaching technical and vocational skills are not a problem of curriculum design, but lie in the inability to implement the reform, as they never took into account the structural realities that hinder proper implementation (Altinyelken, 2010).

In Uganda, one of the main reasons to introduce the new curriculums was to reduce the number of subjects and thus the cost of printing textbooks and teaching materials, rather than in terms of content, even though new curriculums cover many of the same areas as the previous ones.[69] The rationale is to make textbooks and teaching materials more available in the schools so as to improve the quality of teaching. However, as discussed in Chapter IV, there is still a significant shortage of textbooks and teaching materials. Further, teacher training programs have not adjusted to these new curriculums; and in-service trainings to familiarize teachers with these new curriculums are almost non-existence. This is compounded by the fact that there are no departments or individuals with specific line management responsibilities for launching the new curriculums and monitoring their implementation (Penny, 2008).

[69] Retrieved 12 October 2010, from http://www.unesc.go.ug/index.php?option=com_content&task=view&id=359&Itemid=80&_limit=1&limitstart=1

Consequently, teachers do not have the capacity to teach and are not under pressure to teach the practical skills promoted in the new curriculums. A study by Chisholm and Leyendecker (2008) reveals that Ugandan classroom practices still 'revolve around a traditional model of curriculum … and instruction rather than one based on the development of meaning, inquiry-based teaching and practical applications of science to real life, all seen as missing from teachers' pedagogical strategies, rendering teaching and learning mainly "theoretical"' (p. 197). Experienced Ugandan educators also note that Ugandan students are loaded with useless knowledge, a lack of ability to apply knowledge, and no critical and creative thinking, reasoning or innovation (Komakech, 2009). This is evident by the fact that while 66, 58 and 60 percent of students who participated in a national survey achieved conceptual understanding in, respectively, numeracy, geometry and statistics, only 29, 2 and 11 percent respectively can apply that conceptual understanding (MoES, 1999).

However, the most important reason why fact and theory teaching and learning are practiced in the classroom is because teaching and learning processes are geared towards passing national examinations. It is within this context that Greaney and Kellaghan (1995, p. 3) note that public examinations have a negative effect on teaching practical skills as teachers teach what will be examined — placing too much emphasis on facts, leaving out many other topics, including skills, attitudes, understanding, and the capacity to apply knowledge to daily life and the world of work. Nor do these facts usually relate to local reality. For example, one question on the Uganda primary national examination asked, 'Through which organization do farmers in Denmark market their produce?'

Teachers also express the same perception: 'You teach about the development of agriculture in Western countries, but do not teach how to do agriculture in Uganda, to be specific for Jinja district, how to fish in Lake Victory' (personal conversation, 27 July - 2 August 2009). A recent World Bank study argued that 'A departure from the currently dominating rote learning in African classrooms to the provision of higher skills and competencies requires a departure from current assessment practices. If the implementation of assessment practices and instrument lags behind the curriculum

reform, the relevant skill in the new curriculum has little or no chance to make it into curriculum' (World Bank, 2008a, p. 62).

In contrast to Uganda, in Cambodia immediately after the end of the civil war, the new general education curriculum was introduced in the mid-1990s; however, it did not focus on technical and vocational skill formation but instead on literacy and numeracy, following recommendations made by the World Bank and the Asian Development Bank. They argued that strengthening the national economy could be most rapidly achieved by investing in education and training that provided immediate return through short course trainings in TVET (ADB, 1996; World Bank, 1994). However, many students dropped out before completing their basic education, as discussed in Chapter III; therefore, they were not eligible to enroll in TVET institutes. Further, the coverage of TVET was limited to only a few urban areas and geared toward the formal and modern industry sectors, which did not correspond to the rural and informal economy.

In response to this, Cambodia considered diversifying and deepening its low human resource base as a central strategy to promote new and sustainable sources of economic growth and improvement in living standards. These are core goals in their many development plans, including poverty eradication plans and national development plans, as well as education strategy plans. Consequently, a strategy to tailor the general education curriculum to necessary local skills was adopted in the early 2000s through the introduction of the new basic curriculum, which includes a local life skill program.

To achieve the objectives of the reforms requires not only financial resources, but also the capacity to understand and implement the reforms. Unfortunately, the Cambodian government has neither the budget nor the human resources to implement the program. Instead, it identifies the program as an opportunity for parents, local communities, and NGOs to cooperate and work together to provide training in specific skills that have a particular relevance to their local economy. However, the objective of making the program contribute to the development of the local community has not materialized for two reasons. First, there is a lack of funding as

poor communities were unable to mobilize resources to implement the program. Second, although some schools can mobilize resources to implement the program, they have not been able to provide appropriate skills for community development.

A field visit revealed that local life skill programs never go beyond traditional skills.[70] Keng (2009) argues that in Cambodia the foremost constraint on handling education reform effectively is the lack of capacity at both the individual and the institutional levels. In this case, on the individual level, as presented in Chapter IV, school directors have low formal qualifications, which hinders their capacity to plan and analyse the types of basic life skills that their communities need; and on the institutional level, teacher training institutes are unable to train local life skill teachers, so schools have difficulty finding such teachers.

The lack of appropriate basic life skill programs is compounded by the fact that the MoEYS places priority on national standards and uniformity as seen in article 23 of the Education Law: 'The ministry in charge of education shall clearly define the programs of study for general education which are compulsory for all educational establishments in the Kingdom of Cambodia'. Schools are expected to adhere strictly to both the school calendar and national curriculum, which do not reflect each local community's reality. Teachers and educational specialists with experience in rural and remote communities question the relevance and value of the existing curriculum for many pupils (Middleborg, 2005). This is because the curriculum was developed without sufficient technical expertise and wide consultation.

A long-term expatriate working on education in Cambodia notes that 'We are supposed to have skilled professionals to get the professional things done, but in Cambodia no one with a degree in curriculum writing is participating in the curriculum development' (interview, 7 August 2008). Further, teachers are not included in the process of curriculum development. They have little or no access or input despite their vast classroom experience. They are seen as implementers of the

[70] Fieldwork research in Cambodia from August 2008 to March 2009.

teaching program rather than as professionals who can analyse, interpret, and make reasoned judgments as to how and what to teach (Knight and MacLeod, 2004).

Although general education in both countries fails to promote basic technical and vocational skills, they are relatively successful in producing candidates for TVET institutes, which both countries have also attempted to expand. The next section will examine the provision of TVET in specialized institutes in Cambodia and Uganda.

V.3.2 Skill provision through specialized institute

In Uganda, despite the calls for expansion of TVET in the 1989 education review commission report and the 1992 EWP, nothing changed substantially, especially in terms of budget allocation. As discussed in Chapter II, much of the budget for post-primary education is allocated to secondary and higher education. In addition to low budget allocations, the TVET sub-sector never received the amount that was officially allocated to it; the reduction was as high as 47.3 percent in 1997 (MoES, 1999). The lack of funds hindered the ability of the government to employ sufficient staff to improve the situation and expand its coverage and programmes. In the early 1990s, every TVET institute lacked instructors; in some extreme cases up to 40 percent of instructor positions were open. In the department of TVET at the National Curriculum Development Center, which was responsible for reviewing and developing curriculum to address the needs for skilled labour, seven staff positions were open out of nine established posts in 1995 (MoES, 1990; Uganda Polytechnics Kyambogo and Uganda Manufacturers Associations, 1995). Consequently, TVET institutes continued to teach an outdated curriculum that no longer satisfied the needs of the contemporary labour market and economy and its coverage is very low.

In contrast to Uganda, technical and vocational skills in Cambodia were given priority both by donors and the government. In the early 1990s, donors and the Cambodian government invested in short courses in TVET to respond to the need for immediate skilled labour. This led to the rehabilitation of provincial training centers and the National Training Boards was established — made up of government officials, training providers (public and private), and employers — to design policy in order to align training and education to the labor market needs. Although this reform

contributed to an increase in enrollment, the capacity to enroll new students was limited, totaling only about 10,000 positions (ADB, 2004b, p. 3).

V.4 Cause of low coverage of TVET

Despite the different policies' emphases, there are similar constraints that both countries faced in expanding their coverage of TVET during this period. First, due to the overall low expenditure on education during the 1990s, as discussed in Chapter II, both countries faced financial shortages to expand the coverage and provide a more diverse skilled labour pool because of expensive machinery and equipment for training workshops. This was compounded by the fragmentation of the TVET sub-sector. In Uganda, there is no systematic policy and planning for the TVET sub-sector as there is no coordination agency, and technical and vocational training institutes are directly supervised and under the responsibilities of different specialized ministries (Semwogerere, 2010). As is the case in Uganda, in Cambodia TVET institutes are organized and run under the authority of more than 10 different ministries, while the MoEYS serves as coordinator. All of these ministries have limited financial resources and few capable staff.

As a result, department-based TVET institutions in each ministry only served the interests of their mother ministries or a small industrial sector. Therefore, these department-based TVET programs could not respond to the needs of the labour market. This may also be a result of the lack of participation by employers in policy making (Knight and MacLeon, 2004). Although the government has committed itself to a wide consultation process in policy formulation with other stakeholders, this consultation has occurred mostly between government officers, donors, and to some extent NGOs, but with limited participation from the private sector (MoEYS and Education Sector Working Group, 2005; Talemwa, 2010b). This results in alienation between the graduates from training institutes and the world of work and needs of the labour market.

Second, most of the TVET institutes — public and private — are concentrated only in urban areas and, therefore, do not cater to the majority of the population in rural areas. Although private providers in TVET in both countries have increased rapidly, they

operate on a small scale, lack capital, and have difficulty in accessing credit. Therefore, those providers are not able to expand their coverage or provide diverse courses because of expensive workshop machinery, equipment, and teaching materials. Further, it is too risky for the private sector to expand their coverage because market information is incomplete. Investors in the early 1990s and even recently looked at short-term benefits, mostly investing in natural resources and not in productive sectors with long-term goals. In many cases, the investment plans were not even realized. This problem is compounded by the fact that a significant proportion of children did not enroll in school and many dropped out even before completing basic education (as presented in Chapter III). They are not eligible to enroll, as TVET institutes require basic formal schooling. Consequently, many young people enter the labour market without sufficient skills to improve their living standards and contribute to economic growth.

The low coverage of TVET is not only attributable to a lack of capacity on the part of private and public providers, but more importantly attributable to the inability of both governments (although to varying degrees) to create supportive policies and mechanisms and to promote equal value between TVET and the academic stream. The director of the Cambodian National Polytechnic Institute argues, 'Cambodia's industrialization vision and process do not go hand in hand with the development of its skilled labour and this is the reason why Cambodian industrialization is lagging behind its neighboring countries' (Barber and Cheng 2010). Addressing this problem, Susanna Coghlan and Sandra D'Amico, directors at two different human resource agencies who work to recruit graduates for the private sector, note that the Cambodian education system fails to prioritize vocational training over higher learning to better match skills to labour market needs and to provide skilled labour that can diversify the country's economic base and move to the next stage of industrialization (Green, 2009). And to a lesser degree, upper-secondary education was prioritized over TVET.

In Cambodia, despite the shortage of skilled labour and the fact that there are no TVET centers at the district level, the government has no plans to create such centres. The focus is rather that every district should at least have one upper secondary school. In two provinces where special economic zones were created, the government

supports the creation of a university in each province rather than strengthen TVET. At the macro level, analysis of 11 public higher education institutes that were part of the Priority Action Program in 2001 reveals that 27 percent provide courses related to vocational and technical training, but get only 9 percent of the total budget. This is because government support is awarded not in terms of their specialized functions, but in terms of the enrollment numbers. Out of the total enrollment of nearly 8000 students in these institutes, only about 9 percent are enrolled in TVET institutes (MoEYS, 2001).

In Uganda, because of the drop of priority in higher education in the late 1990s, as discussed earlier, and the outcry for a skilled workforce, in 1998 the TVET system was restructured. The responsibility for overseeing the activities of the TVET institutes was transferred from various ministries to the MoES to reduce the fragmentation and provide a common objective: 'To prepare adequate skilled manpower that is necessary for higher agricultural productivity, diversification of the economy, and industrialization of the production system' (Namuli, 2001). In addition to the structural change, a stimulating framework, providing the appropriate legal and regulatory framework and capacity-building programs were implemented with support from donors such as GTZ and JICA. Private providers were not only encouraged, but also strengthened through a pilot project on 'Promotion of employment oriented vocational training' supported by GTZ (Wirak, 2003, p. 5).

Although TVET enjoys some direct bilateral aid from GTZ and JICA to cover critical areas of investment, this assistance is insignificant compared to the total amount of external funding for secondary and higher education (Berry et al., 2003). This hampered the course delivery reform and the expansion of TVET. At the same time, the encouragement for public-private partnership as a strategy for enhancing the quality as well as the expansion of TVET was not quite successful. The private sector was still unable to access credit, therefore could not offer diversified skills because of the expensive physical infrastructure of TVET. Further, the majority of TVET provided similar courses related to formal employment, which overproduced graduates in these areas as the labour market and economy could not absorb them as the size of the industry and service sectors are still small. Consequently, TVET does

not respond to the huge informal and rural economy of Uganda. Therefore, the problem of skill shortages remains unsolved.

V.5 Cambodia has a slightly wider coverage of TVET than Uganda

In response to this situation, in 2005, the Ugandan government introduced a policy to develop technical farm schools and community polytechnic schools for primary school graduates in each sub-county. However, there are a limited number of graduates from these schools. First, this policy lacks sufficient funds for its implementation. Second, many children dropped out before finishing primary school; consequently, they are ineligible to enter these schools. Further, for those who passed primary school examinations, the majority preferred to enter secondary school rather than enter farm and community polytechnic schools. The reason for their choices is that students who entered these TVET schools are considered less capable and academically deficient compared to those who continued on to secondary school. In addition, when they enroll in these TVET schools, they have to pay school fees, while the government introduced free secondary education in 2006, which gave more incentive for them to pursue academic educations.

Consequently, although, there is an increase of enrollment in TVET from 14,077 in 2000 to 29,441 in 2008 (MoES, 2006a; 2008b), this enrollment is still modest, because it represents only 0.3 percent of the total labour force and 5percent of the new entrant labour force annually. There has even been a sign of a decrease recently, particularly since the introduction of universal secondary education. For example, out of nearly 450,000 primary graduates, only 960 graduates enrolled in vocational institutes in 2011, a drop from 3720 in 2010 (Ssenkarirwa et al., 2011).

In Cambodia, the TVET reform has accelerated since 2005 when the new ministry, the Ministry of Labour and Vocational Training (MoLVT), was created and took over responsibility from the MoEYS to coordinate the TVET sub-sector, and the role of the National Training Board was strengthened with support from donors, especially from ADB and South Korea. The reform led to a dramatic increase in enrollment from roughly 10,000 during the late 1990s to 90,000 in 2007 (ADB, 2008b). The enrollment represents a small percentage — only 1.1 percent of the total labour force

because of its historically low enrollment in TVET. However, it represents a significant percentage, 30 percent, of the new entrant labour force annually. This pattern of development in Cambodia seems to follow the East Asian experience, although it came at a later stage and at a lower quality and narrower scope. For example, in Singapore, at the early stage of its development, the number of graduates in technical and vocational institutes quickly increased at 10 fold within three years. Such an upward swing has continued from 6313 in 1997 to 12,901 in 2000, and reaching 25,000 in 2007 (Seng, 2008, p. 10).

V.6. Factors that led Cambodia to perform slightly better than Uganda

There are several reasons that contribute to the difference in the TVET sub-sectors in Cambodia and Uganda since 2000. First, in Uganda, within the central government, besides the structural changes in 1998, no other major reform has taken place. This is reflected in the fact that of the 35 research studies addressing strategic intervention in the education sector between 1999 and 2003, only one deals with TVET (Eilor, 2004). Further, despite the outcry over a lack of skilled labour and the recognition of its critical role in promoting the economic growth of a country, the TVET department has no power in budget planning. An interview with a senior officer at the TVET department at MoES revealed that the only reason given by MoES in every meeting for not increasing budget allocation is that the TVET sub-sector is an expensive investment that the government cannot afford and that cost-sharing should be introduced. However, according to this informant, it is not only a matter of budget constraints, but also the way in which the budget is allocated across the board (interview, 14 August 2009). Since 1998, TVET received only 3-4 percent of the total public expenditure on education compared to over 10 percent for secondary and higher education (for more detail see Chapter II).

Unlike Uganda, which after the restructuring made no serious commitments in terms of budget allocation, Cambodia saw an increase in budget support for TVET made both by donors and the government. ADB increased its support to the newly established ministry MoLVT from US$10 million in 2005 to $25 million in 2010. Further, the Korean and Cambodian governments invested hundreds of millions of dollars to create national polytechnic institutes where modern equipment was

installed. The Cambodian government also increased its annual budget for MoLVT from US$600,000 in 2005 to $7million in 2007, of which 65 percent is devoted to training institutes. This commitment allows the newly established ministry to coordinate with private providers to create more diverse programs and institutes (ADB, 2008a; Chan, 2008).

Second, although both governments favor secondary and higher education over TVET, the Ugandan government's policies have a stronger bias against TVET as compared to Cambodia's policies, resulting in lower enrollments in TVET in absolute terms and as a percentage of secondary and higher education. The enrollment in TVET in Cambodia is 34 and 66 percent of secondary and higher education, while in Uganda it is much lower at 3 and 19 percent respectively, as seen in Table 5.2.

Table 5.2 Enrollment numbers by education levels in Cambodia and Uganda

	TVET	Secondary education[71]	Higher education
Cambodia	90,000	260,965	135,000
Uganda	29,441	954,328	156,397

Source: MoES, 2008b; EMIS, 2007-08; ADB, 2008a; You, 2009

In Uganda, Liang (2002) argues that the TVET sub-sector suffers from its residual role in an elite academic system. Historically, there is a negative attitude towards TVET as it was considered to be for those who did not meet academic standards. However, the current bias against TVET in Uganda is not only a historical product, but reinforced by political factors and leadership vision. Government policy even discourages people from enrolling in TVET.

In addition to low budget support for TVET, the Ugandan government introduced a training levy in public TVET institutes, farm schools, and community polytechnics

[71] Secondary school enrollment in Cambodia refers to only upper secondary school, while in Uganda it refers to both lower and upper secondary school. This is because while Cambodia defines nine years of schooling (primary and lower secondary) as basic education, Uganda defines primary education as basic education; therefore, graduates are eligible to enroll in TVET institutes. In Cambodia only after lower secondary education are students eligible to enroll in TVET institutes (as seen in Figure 2).

schools, with the expectation of helping to resolve financial difficulties experienced by these institutes, while secondary education is provided free. Actually, local people would like the government to support TVET rather than universal secondary education (Uganda National Commission for African Peer Review Mechanism, 2007, p. 395). They argue that although universal secondary education helps them send their children to school, as they do not have to pay school fees, they do not see any benefits as most of the graduates cannot find jobs because of the lack of practical/vocational skills in universal secondary education, as discussed above. However, the government still continues to allocate a high percentage of the education budget to secondary education. The budget allocation in the education sector in Uganda actually does not result from strategic situational analysis, but was used to fulfill political promises made during the presidential election in 2006 (for more details see Chapter II).

The budget allocated to higher education is also used to realize leadership's visions rather than to address the actual needs of the local labour market and the structure of the whole economy. The Ugandan government has a strong desire to invest in higher education as a means to compete with advanced industrial nations, even though its chances for introducing private foreign capital and developing high tech industries is not very high (for more details see Chapter VI). This is also reflected in the recent shift of the Ugandan government away from polytechnic to academic universities during the restructure of the TVET sub-sector.

An interview with a director of one of the technical colleges revealed that during the process of the merging of Kyambogo's polytechnic institute with other technical and vocational training centers in the late 1990s, everyone hoped that a strong national polytechnic university would appear, but it turned out that a traditional university, Kyambogo University, was created in 2001 and has become the second largest public university (interview, 24 August 2009). This political goal and leadership vision reinforced negative images of TVET and positive images of academic education. This is compounded by the fact that once TVET graduates were hired, they were paid less than white-collar workers, especially in comparison with wages paid by the government and with those who have higher academic educations (Liang, 2002; UBOS, 2006b; 2008). This leads Ugandan parents and youth to perceive that the

TVET program offers inferior opportunities. This system encourages people to compete with each other for white-collar jobs, rather than complement each other in the labour market.

In contrast, in Cambodia the MoLVT launched an awareness program to change young people's and their parents' views about TVET. At the same time, an economic incentive encouraged Cambodian students to enroll in TVET. Unlike their Ugandan counterparts, the TVET graduates are paid lower than white-collar workers and the average government officers, and Cambodian TVET graduates are paid higher than white-collar workers and average government officers, and there is no significant wage difference between TVET and higher education graduates (NIS, 2010a). [72]

Third, vocational and technical training in Uganda is long (two to three years), while in Cambodia most courses range from three months to one year. Although Cambodia offers some two-year associate degrees, the enrollment is still low compared to short training courses (ESAURP, 1991; D'Amico, 2009). The reason why TVET in Uganda is longer than in Cambodia is because of its vision for development. In Uganda, TVET is geared toward formal employment: 'Modernization rather than problem solving was the preferred and widespread method of education delivery' (NCHE, 2006, p. 19). This does not correspond to the structure of the economy as the percentage of formal wage employment is low and agriculture employs the majority of the labour force, as presented above, which requires low level skills that can be offered in short courses.

Finally, the striking difference between the countries is that the newly established ministry, the MoLVT, in Cambodia has not attempted to take over all TVET institutes that are run by different ministries. An interview with a senior staff member at the MoLVT indicates that the MoLVT recognizes its lack of expertise at supervising specialized training institutes and, therefore, it wants to strengthen only its coordination role (interview, 12 January 2010). A senior policy maker at the MoLVT

[72] For example, my salary as a lecturer at the Royal University of Phnom Penh, with a Master's degree is even lower than low skilled workers with certificates in TVET who work in the Electricity du Cambodge.

envisions his ministry as, 'an orchestra leader working to get all the partners in the orchestra to use the same music and play together' (Pich, 2008). This situation allows the TVET institutes to not only operate normally, but also to improve steadily.
In contrast, Uganda transferred responsibility for all TVET institutes that were managed by different ministries to the MoES. Although from a management perspective the transfer of all institutes to one ministry allows for positive coordination, TVET in Uganda did not benefit from this transfer as it did not have the capacity to perform these new responsibilities because the MoES lacks staff and expertise (Liang, 2002, p. 35). After more than a decade of restructuring the TVET sub-sector, the MoES is still not able to fill all the vacant posts. By 2009, out of the 20 approved staff at the department of TVET seven posts remained vacant, and out of the seven approved staff positions at the directorate of industrial training all of them were still vacant (MoES, 2009). Because of this lack of staff, Liang (2002) noted that senior managers are pre-occupied with day-to-day management and have little time or capacity to deal with their main functional areas of responsibility: policy, planning and quality control.

This is compounded by the fact that at the macro level, after more than 10 years of restructuring, specialized ministries still seek to transfer the TVET institutes back to their respective ministry through political intervention. In 2008, President Museveni ordered the MoES to return the medical college to the Ministry of Health, but the MoES protested (Kagolo, 2009b). Consequently, the TVET institutes work without any supervision. A local advisor on TVET issues noted, 'When these institutes seek assistance from specialized ministries, staff at specialized ministry now says: you are not under my supervision, but under the MoES, therefore, you should go to MoES. But when these institutes turn to the MoES, the MoES has neither technical capacity nor the staff to assist these institutions, to say nothing about budget' (personal conversation, 14 August 2009). This situation is not conducive for TVET institutes to operate effectively, let alone improve.

Actually, Cambodia could expand its coverage given its priority on TVET sub-sector, if all the efforts to deliver TVET were consolidated. However, efforts to deliver TVET are fragmented. In the same year as the creation of the MoLVT, the MoEYS

launched a new curriculum policy for upper secondary schools that included elective vocational training in grades 11 and 12. Recently another new department, the Vocational Orientation Department, was established. This department is reflects that Cambodia is at least trying to retain some resources and responsibilities, rather than transfer them all to the MoLVT or attract new resources to implement the new curriculum and program. The resource competition intensified during the sector working group meeting. A senior government officer at MoLVT noted,

During the education sector working group meeting, the task of advocating for more support on TVET to provide relevant training to youth so that they can be (fully) employed after graduation is very hard. First, we need to advocate with donors as they are mostly focused on basic education and, second, to advocate with MoEYS, so that we are not seen by our colleges as trying to steal away their existing resources (interview, 12 January 2010). This competition results not only in fragmentation of effort, but also a waste of resources because of high transaction costs.

What caused this fragmentation? Since late 2000, as the Cambodian People's Party consolidated power during the end of coalition governments, which had involved conflicts over resource allocation among political parties, one hoped for better resource allocation to execute development projects more effectively and efficiently. However, the reality was disappointing. At the time, the fighting was not between political parties, but the ruling Cambodian People's Party's members worked for their own interests, resulting in the fragmentation of efforts to deliver development projects,[73] including the TVET sub-sector. This was not only among Cambodian officials, but also within the donor community. The reforms in Cambodia in general, and in the education sector in particular, were not all initiated by the Cambodian government; they were dominated by donors and foreign advisors because of Cambodia's high aid dependence, as discussed in Chapters III and VI.

[73] There are overlapped and duplicated responsibilities and tasks among government institutions led by the Council of Ministers and specialized ministries, such as the Petroleum Authority with the Ministry of Industry, Mining and Energy, the Tonle Sap Authority with the Ministry of Agriculture, Forestry and Fisheries, the Ministry of Environment, the Ministry of Water and Metrology, and the Apsara Authority with the Ministry of Culture and Fine Arts.

Donors/advisors were fighting for their own 'market' in Cambodian reform. MacCargo (2005) notes that in Cambodia, international and national development agencies were competing against one another on the ground to carve out niche sectors, as well as sub-sectors for their own projects and programs. This was evidenced by the presence of foreign advisors in almost every project and a high proportion of aid funds for technical assistance. Of the total reported expenditure of US$265 million, 12.7 percent was paid to nearly 750 international staff to support the implementation of programs. If an account is taken of program expenditures not covered by the responses to the questionnaires, it can be estimated that expenditures for international personnel could be as high as 19.5-27.34 percent (Siddiqui et al., 2004, p. iii). A study about aid effectiveness reveals that Cambodia almost invariably does not refuse external offers of technical assistance personnel, including those that might be suspected of being unnecessary or dysfunctional (Land and Morgan, 2008, p. XI).

According to the study, this acceptance resulted from both the ministry and central levels. At the ministry level, two reasons are found. First, the ministry lacked the capacity to negotiate effectively with donors, and, second, the ministry displayed a willingness to accept any programmes and projects in order to secure resource flow, thus benefiting the ministry and its staff in terms of possible salary supplements, operational costs, and office equipment. At the central level, the government was concerned about the risk of international isolation and lost development funds if it were to say 'no'. Further, the Cambodian government was not in a position to impose discipline and a coherent direction on the behaviour of the technical assistants, which resulted in donor-led control of projects and programmes and a growing fragmentation of development interventions (Land and Morgan, 2008, pp. 18-19) approved by its own specialized ministry.

Although this might result from a lack of coordination among donors and the lack of institutional integration in terms of shared common development goals, this fragmentation resulted from the weak state. The weak state was not only a consequence of the subordination of formal structures to informal networks among the ruling party, Cambodian People's Party (CPP), but also a matter of pursuing personal interests. Hughes and Conway (2004) note that 'Such networks should not be

perceived as working consistently in the support of the CPP. Rather, they often conflict, as different individuals and groups within CPP and the state attempted to exploit different kinds of opportunities' (p. 23). This is compounded by the fact that the ruling elites intentionally co-opt the clients in various ministries in order to exchange loyalty and political support with the ultimate goal of maintaining themselves in power.

V.7 Higher education in Cambodia and Uganda

Before the late 1990s, higher education in both countries was predominantly provided by the state. Although Uganda put more emphasis on higher education than Cambodia, their coverage was very low. Annually, the Cambodian and Ugandan governments provided scholarships to approximately 4,000 and 2,000 students, respectively. The landscape of higher education in both countries was transformed completely in the late 1990s when privatization reform was introduced that included allowing private higher education institutes to be established and self-sponsored students to enroll in public higher education institutes. Since then, the number of higher education institutes in Cambodia and Uganda has increased rapidly, especially the private institutes, reaching 77 and 169 respectively in 2008. This contributed to the increased enrollment in higher education in Cambodia and Uganda from fewer than 10,000 and 30,000 in the early 1990s to more than 130,000 and 156,000 in 2008, respectively (MoES, 2008c; You, 2009).

Actually, in both countries there is widespread skepticism about the role of higher education as many university graduates are either unemployed or underemployed (for more details see Chapter VI). This situation underscores that higher education provisions in both countries have not responded to the need for local labour markets for specific jobs. Both countries are generating many university graduates that are unsuited to fill the large demand for vocational and technical occupations (Mullins, 2010). For example, in Cambodia, even within the limited enrollment in Information Technology (IT), in 2009 only 62 percent of IT graduates found employment in the sector, and as a result of over-supply this figure is expected to drop to 33 percent in 2010 (CIST, 2009). During fieldwork in Uganda, I noted that many university graduates have a very difficult time finding jobs, and some of them who could not

afford to stay unemployed went back to school for training in specific vocational and technical careers. In the end, they found jobs.

This is not only a matter of limited jobs in the labour market, but also reflects the higher education supply in both countries that tends to favor the service sector at the expense of the productive sectors such as agriculture and industry; consequently, schools are not able to provide graduates to meet labour market needs (Kasozi, 2003; Chet, 2009). For example, while there is high unemployment among IT graduates, IT institutes are not able to fill the needs of the IT labour market for programme developers and graphic designers (CIST, 2009). In Uganda, Kasozi (2003) and Liang (2004) also stress this concern, arguing that among the major challenges for educational reform in higher education is the problem of designing curricula that are appropriate and relevant to Ugandan development needs. This concern is also shared by graduates. Kirumira and Bateganya (2003) note, 'The breakdown of weakness identified by graduates shows that curriculum issues are in fact of greatest concern … nearly one-third of all weakness related directly to the lack of relevance of undergraduate degree programmes, which are widely regarded as being too theoretical with not enough job-related practical training' (p. 41). As a result, the gap between educational preparation and actual employment opportunities is widening.

Further, the enrollment in the four disciplines[74] (science and engineering, manufacturing and construction, health and welfare, and agriculture) that are considered the core for economic development in Cambodia and Uganda is very low at 26.64 and 16.42 percent compared to enrollment in humanities and arts, social sciences and business, which is 73.36 and 83.58 percent respectively. The overwhelming enrollment in these disciplines indicates that the system lacks diversification and may be serving a limited clientele and objectives, mainly for government employment and white-collar jobs (Liang, 2004, p. 30).

Specifically, where agriculture is so crucial to their economies in terms of its contribution to GDP and the labour force it employs (for more details see Chapter VI),

[74] These disciplines are classified by UNESCO in its statistical data base. It has been adopted since it is best suited for comparative purposes, as the national data classification is not comparable.

between 2001 and 2004 the enrollment in agriculture of total enrollment in higher education in Cambodia increased only from 3.3 to 3.8 percent, while in Uganda enrollment even declined from 2.87 to 1.58 percent,[75] despite a report that the highest employment rate is found among agriculture graduates (Kirumira and Bategunya, 2003). In Cambodia, even a critical discipline in agriculture was no longer provided. A Cambodian researcher notes that the agricultural university that had provided courses on irrigation engineering discontinued those courses 10 years earlier and since then no such courses have been available, despite the government calling itself an 'irrigation government' that promotes irrigation investment and construction for the improvement of agriculture.[76]

This pattern of development in higher education in both countries does not follow the successful experiences of East Asian countries. For example, in Singapore, just within a decade, the highly skilled workforce in research scientists and engineers grew more than threefold, from 3,361 in 1987 to 11,302 in 1997 (Seng, 2008, p. 60). This is a result of Singaporean policy makers who share a strong and clear vision of creating an education system for the development of the country. The Singaporean education minister argues that, 'Singapore will be poorer if everyone inspires to and gets only academic qualifications but nobody knows how to fix a TV set, a machine tool or a process plant. We need a world-class workforce with a wide variety of knowledge of skills to achieve a world-class standard of living' (Koo, 1999, p. 95). Consequently, admission into tertiary institutions is merit-based and the central goal is to build a needs-based pool of Singaporeans with a mix of education and skills rather than a supply-driven and bloated higher education system (Koo, 1999, p. 72).

During a research tour in East Asia, African education policy maker Mamadou Ndoye (2008) remarked that 'education planning is rarely integrated into national development planning and rarely fosters approaches apt to develop endogenous potentials. In this respect, higher education and research are rarely equal to their

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[75] Retrieved 18 October 2010, from http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx?ReportId=168

[76] Cambodia's ethnic Vietnamese cross the border to go to school. campro@googlegroups.com, 7 October 2008.

mission of producing and disseminating relevant information and competencies in the African contexts' (p. 71). This conclusion also holds true in the case of Cambodia and Uganda where such strategic vision and planning are absent. In Cambodia, only a quantitative target was set in its education plan to increase the enrollment from 25,000 in 2004-05 to 90,000 by 2010, which was more than successful as the actual enrollment reached more than 130,000 in 2008.

In Cambodia, this lack of vision is reflected in the absence of strategic planning at the largest public university, the Royal University of Phnom Penh, since it reopened in the 1980s until recently. In 2008, the process to adopt a new vision, mission, and goals was implemented by including all relevant stakeholders within the institution, but the private sector was still ignored in the planning process despite the fact that it is the biggest employer of graduates. David Ford (2006) argues that the lack of strategic vison and planning is a result of politicizing higher education institutes. He writes that an 'indication of how politicized the sector has become is the recent appointment of senior positions in the ministry and public higher education institutions according to a power-sharing formula between ruling parties that had little reference to competence and expanded an already bloated and ineffective civil service bureaucracy'. In addition to this, there is also a political battle over reform legitimacy. In the early 2000s, MoEYS, led by a FUNCINPEC Minister, proposed higher education reform, the creation of an Accreditation Committee, with support from donors, but this plan was rejected by the government. Later, an Accreditation Committee of Cambodia was established, not under the MoEYS, but under the Council of Ministers, led by a CPP Minister. The Council of Ministers amended the draft, adding no technical aspects but staff recruitment specifications that are crucial to build political support and provide jobs for ruling party clients.

In Uganda, there is a lack of institutions responsible for coordinating the higher education sector. Despite the fact that higher education institutes have mushroomed since the late 1990s, the Ugandan National Council for Higher Education was just established in 2004, and still has a limited capacity in terms of both human and financial resources to carry out its tasks. Consequently, contrary to the Singaporean experience presented earlier, higher education in Cambodia and Uganda is influenced

not by strategic vision and planning, but by their supply-driven education services. In Cambodia, out of 77 higher education institutes, only a few offer courses in science and engineering, manufacturing and construction, health and social services, and agriculture (MoEYS, 2008b). In Uganda, among 1774 programmes offered in more than 160 institutes, only 22 percent are in the fields of science, engineering and technology, compared to 78 percent in arts and humanities (NCHE, 2006). Further, they are limited only to utilization, with limited research and development activity.

Several similar reasons contribute to this lack of diversified courses in both countries. First, in Cambodia and Uganda, private providers look at educational provision as a business rather than a public good. There is a risk as such commercialization in most private institutes has tended to focus on the perceived earning capacity resulting from the course in the short-term — those who graduate from these courses are sought after by donor agencies and a small private sector service and are normally paid well by them — to benefit individuals at the expense of those that might contribute to national development in the long-term. The model they adopted is one that maximizes profit, so access is usually open to all those who have completed high school and can afford the fees (O'Brien, 2004, p. 10). For example, in Cambodia, 50 percent of employment in IT is in support jobs, which means that half the jobs require practical skills, not a bachelor's degree; but it appears that few people opt to take the shorter, more efficient, and ultimately cheaper route of technician training (CIST, 2009). Lancaster (2009) argues that it 'could be that students are encouraged by education institutions to study for longer so they pay more. ... As a result of making ill-informed decisions it appears students are wasting their time and money' (p. 30).

Second, most private higher education institutes operate on a small scale with limited capital. They also have difficulty in securing loans. Consequently, their survival and expansion depend solely on fee-generating income, and this forces them to follow the education market to attract students rather than to research and offer what the economy or labour market needs in terms of skills (interview, 13 October 2008). In Uganda, the programs offered are duplicated. The departments create programs solely to attract students so as to earn money (Karamagi, 2004). Further, the majority of the higher education institutes' revenue is spent on administrative costs; therefore, they

are not able to diversify their programs, especially in science, engineering, manufacturing, construction and technology because of the expensive equipment and materials required for laboratories, research, and development activity.

Third, this also results from the inability of the government to upgrade university entrance standards. The bottom line for entry into a university is seemingly no longer about 'academic capability', but rather 'financial capacity' (Matsamurakiapi, 2009). Consequently, the government was unable to channel secondary education graduates to enroll in TVET, which has been badly needed for the economy to function effectively and efficiently, but instead produced specialized unemployed and underemployed university graduates. This is the opposite of the Singaporean experience that planned not to waste scarce resources while maintaining quality by developing a mechanism to matriculate high-quality students, including a merit-based admissions policy to higher education so that many students can enter TVET. Singapore also has ensured a balance between 50 percent science-based and 50 percent art and humanities since the early 1980s (Goh and Tan, 2008).

This strategy has been adopted in France since the early 20th century. In their study on the relations between education, economic growth, and the role of the state in France between 1825 and 1975, Hage et al. (1988) noted that

> Each school was designed to meet a very specific human resource need, such as foremen for mines, chefs, watchmakers, hotel managers, accountants, and bank clerks. Similar efforts took place in agriculture. As an indication of how tightly economic and educational policies were linked, low-interest agricultural loans were restricted to holders of agricultural degrees, the assumption being that only educated farmers could use the money effectively. (p. 827)

The situation caused by lack of planning in Cambodia and Uganda is compounded by a lack of corrective directive action by the government. Chet (2009) argues that public universities try to compete with the private sector in the fields of humanities, art, social sciences, and business, but forget to invest in what the private sector cannot do, such as science, engineering, technology, manufacturing, construction, and agriculture. Further, in Cambodia, despite the outcry for more scientists, engineers

and technicians, and skilled agricultural workers, the vice rector of one public university notes that the government provided an equal number of scholarships across all disciplines at one of the newly established universities (interview, 17 October 2008). Personal conversations with staff at the higher education department of the MoEYS indicate that the MoEYS is aware of the issue of the oversupply of graduates in certain areas and the lack of graduates in others, but the MoEYS is waiting for donors to approach (personal conversation 7 October 2008). The delay is a result of a specialized ministry not empowered to initiate new policy or is afraid to initiate new policy if there is no support from donors and top leaders.[77] Consequently, a specialized ministry usually carries out only routine work.

In this sense, the poor state of science, engineering, manufacturing, construction, and technology partly results from donors' behavior in education intervention. The majority of support from donors to higher education since the early 1990s goes to non-science related disciplines, and thus is limited not only to the availability of highly skilled labour in these fields, but also does not help to increase the instructors in these fields who can provide training in local institutes. Actually, during the 1980s Cambodian students studied in the communist bloc. Most of them took courses in the hard sciences as the government planned to build a strong socialist economy, but this trend changed in the 1990s.

A spokeswoman for the Russian embassy claimed the hard sciences have given way to softer disciplines such as management, politics, and psychology. And the government does not have a policy to encourage students what to study, nor do the host scholarship countries dictate to the students; otherwise they might prefer to go elsewhere (Barton, 2008). The shift made by Russia is following competition by other Western governments, especially the United States of America and the European Union whose main objective is to challenge and remove the socialist ideology and planned economy. Only a few donor countries such as Japan, France, and recently South Korea provide scholarships for hard science, but the number is limited. The Cambodian government is also responsible for the shift from hard sciences to softer disciplines. Cambodia is characterized as a beggar country that receives whatever

[77] In Cambodia, Prime Minister Hun Sen became involved in every new initiative, ranging from local traffic issues to national vision and international issues.

other countries offer without strategically formulating its demands based on the country's need. For example, despite the recognition that Cambodia had significant deposits of petroleum long ago, there is no strategic plan to educate petroleum engineers, and the recent attempt to explore and exploit this resource faces difficulty because of the lack of skilled workers.

In Uganda, in trying to fix the situation the government refocused its priority on higher education. This is reflected in the increase of budget allocated to higher education from 3.5 percent of the total government public expenditure on education in 2002-2003 to 11.7 percent in 2006-2007, as discussed in Chapter II. During this period, three other public universities were established funded by the government, leading to a total of 5 public universities in Uganda. This policy change reflects some efforts by the government to make higher education more responsive to the labour market and economic needs. In 2005, the Ugandan government implemented the policy of shifting its sponsorship in public universities by allocating 3,000 slots, which is 75 percent of its total scholarships for science-related subjects and another 25 percent, which are 1,000 slots for art and humanities. The policy noted Korea and Japan had taken science seriously after the end of World War II, and was the main education policy that contributed to the success of developing their countries.

Although this is a positive step, there is a question concerning the Ugandan government's ability to actualize this policy. Although, the government increased the budget for higher education, much of the budget goes to administrative rather than program investment. Although a donor such as the World Bank provides loans to Uganda, the limit of US$30 million is insufficient to promote science. Collins and Rhoads (2008) ask if US$30 million really helps Uganda keep pace with advances in university science and technology.[78] Further, 3,000 slots for sciences-related subjects is very small, and unlikely to alter the situation compared to the total enrollment of

[78] Collins and Rhoads (2008) ask this question because they do not see how US$30 million can significantly contribute to the betterment of science and technology. They give an example that a single university in the United States, Johns Hopkins University, received US$612 million in one year alone (2005) from the National Institutes of Health, and Stanford University spent over US$600 million on research for one year, while their own university, UCLA, spent over US$800 million.

over 150,000 students. Furthermore, there are not enough qualified science graduates from secondary schools; consequently, public universities have to reduce the entry point (requirement) for public-sponsored students in the field of science. This is because the Ugandan government does not provide substantial support for science at lower levels. Therefore, it does not have a strong foundation. This raises the issue of the quality of higher education that may not contribute to the overall development of the country as intended. It is within this context that a Ugandan scholar argues, 'Relevant or irrelevant to graduate employability, however, university training cannot do anything about this. … If it is wrong for a university to produce as many humanities graduates, therefore, the secondary schools are blamable since it is here that students are predisposed thus' (Ssempebwa, 2008).

To some extent this is also true in the case of Cambodia. Jerry Walter argues that the new curriculum in the early 2000s had no relevance to Cambodia's needs. He writes, 'With a complete lack of genuinely trained and competent engineers in Cambodia, there is surely a vital need for an immediate upgrading of teaching mathematics and science to provide the essential fundamentals for engineering studies' (Walter, 2002). Recently, a new secondary school curriculum in Cambodia was introduced, which put more emphasis on strengthening mathematics and science. In this sense, Cambodia is attempting to build a strong foundation in mathematics and science before it attempts to reform higher education, while Uganda reforms its higher education without building a strong foundation of mathematics and science in general education.

Although higher education in both countries was not able to produce relevant graduates, the situation in Uganda seems to be direr than in Cambodia. The Ugandan government misallocates public resources more than Cambodia, as reflected in its higher public expenditure per tertiary student as a percentage of GDP at 178 percent, compared to Cambodia which is only 43.7 percent.[79] The higher spending on higher education in Uganda is for to two reasons. First, as presented above, the Ugandan leadership vision is geared towards modernization that focuses on higher education, despite the fact that it lacks appropriate infrastructure to utilize highly skilled workers.

[79] World Bank, data. Retrieved 23 October 2010, from http://data.worldbank.org/indicator/SE.XPD.TERT.PC.ZS

This is also reflected in the recent Ugandan national development plan 2010-2011-2014-15, which has an ambitious vision and favors higher education, despite the fact that its economy is still predominantly agricultural and its historical record of FDI on high-tech is low. The development plans attempt to improve the country's competitiveness to the levels associated with middle-income countries through promoting science and technology, innovation and ICT as measured in terms of share of exports with high-technology content in the total sum of exports. The recent Cambodian national development 2009-2014 vision is more consistent with its economic evolution and may be achievable if it is properly implemented. The plan is designed to establish competitiveness in regional and world markets by focusing on agriculture aimed at rice exports and an assembly industry, which requires an investment in TVET rather than higher education.

Second, in Uganda, due to its reputation as a center for higher education, there are those who advocate revitalizing higher education in order to become a center of excellence, either within East Africa or Africa as a whole and beyond. However, this project results in brain-drain rather than helping the country. Mamdani (1993) writes,

> In our single-minded pursuit to create centres of learning and research of international standing, we had nurtured researchers and educators who had little capacity to work in surrounding communities but who could move to any institution in any industrialized country, and serve any privileged community around the globe with comparative ease. In our failure to contextualize standards and excellence to the needs of our own people, to ground the very process and agenda of learning and research in our conditions, we ended up creating an intelligentsia with little stamina for the very process of development whose vanguard we claimed to be. Like birds who cross oceans when the weather turns adverse, we had little depth and grounding, but maximum reach and mobility'. (p. 15)

The higher spending on higher education in Uganda more so than Cambodia, however, does not produce more graduates in disciplines that are more crucial for economic development. In fact, the enrollment in the four disciplines (science and engineering, manufacturing and construction, agriculture, and health and welfare)

considered to be the core for national economic development in Uganda is only at 16.42 percent, even lower than Cambodia at 26.64. This is because Cambodian higher education institutions are more specialized (for example, the Cambodia Institute of Technology, Royal University of Agriculture, University of Medical Science, and National Polytechnic Institute). Such specialization created fewer duplicated programs compared to the traditional university (one university that consists of a variety of schools and faculties) in Uganda that provided more duplicated programs, as discussed earlier.

V.8 Concluding remarks

This chapter has demonstrated that educational provisions in both Cambodia and Uganda, although to different degrees, do not respond to the needs of the local labour market and economy. This is because they are not able to produce a balance of diverse skilled labour. Consequently, there are shortages of skilled labour in technical and vocational jobs and shortages of highly skilled labour in fields such as science, engineering, manufacturing and construction, technology, agriculture and health.

The lack of technically and vocationally skilled labour is not only a matter of financial constraint — although poor countries such as Cambodia and Uganda with their recent strategic histories and marginal investments in education during the last two decades still need more resources — but is also an inability to give priority to TVET in terms of budget allocation and the fragmentation of efforts to deliver TVET. There is unclear responsibility among different government agencies to deliver TVET. This situation leads to a waste of both effort and resources. Further, although general education is important, to be able to adopt modern technology and mechanized agriculture and promote industrialization process, technical and vocational skills are required but have not been supported by the Cambodian and Ugandan general education curriculum. Despite their attempts to mainstream technical and vocational skills into their general education curriculum, both Cambodia and Uganda fail to do so as the reform in both countries does not take into account the structural problems that hinder their implementation. These include both financial resources and capacity at the individual as well as the institutional levels, and, most importantly, the national

examination system forces schools to teach what is examined, usually fact memorization rather than skill application.

It is important to note that while there is a shortage of a skilled workforce in TVET and highly skilled labour in fields such as science, engineering, technology, agriculture, and health, in both countries there are high rates of specialized underemployed and unemployed graduates. This is because both countries are actually generating far more university graduates in the field of humanities, arts, social sciences, and especially business who are unsuited to meet the needs of the local labour market and economy. There are at least three reasons that contribute to this phenomenon. First, in order to promote science, engineering, manufacturing, construction, technology, agriculture, and health, students need to have a strong foundation in mathematics and basic science, which basic education in both countries was unable to provide. Second, due to privatization, which leads to the commercialization of education service, public higher education institutes in both countries are competing with the private sector for private self-sponsored students to enroll in their institutes only in the fields of humanities, arts, social sciences, and business, and, therefore, neglect to invest in other critical areas such as science, engineering, manufacturing, construction, technology, agriculture, and health. Finally, both countries are not able to upgrade university entrance standards in order to guide students to enroll in TVET.

However, Cambodia has, generally speaking, a slightly better technical and vocational skilled workforce compared to Uganda's. Although different policy priorities and resource availabilities appear to influence this different outcome, the efforts to improve TVET are not only limited to policy priorities and resource availability, but also are due to other factors such as cultural aspiration, economic incentives, and, most importantly, management and coordination. Further, this is also reflected in the fact that higher education in Uganda produces less relevant skilled workers compared to Cambodia, despite its higher percentage of public expenditure and better policy design of higher education. This is because Cambodian higher education institutions are more specialized, therefore provide less duplicated programs compared to the traditional university in Uganda that provides more duplicated programs.

CHAPTER VI
DEVELOPMENT IN CAMBODIA AND UGANDA: THE ROLE OF EDUCATION

VI.1 Introduction

Development has a complex multi-dimensional nature involving political, social, economic, and cultural aspects. However, economic development is the key as it provides a means to achieve other aspects of development. GDP and GDP per capita are commonly cited as the yardsticks for measuring a country's level of development. Recently, the level of poverty is added as another best measurement of development because it is not only the indicator for a lone individual's welfare, but also the indicator of an individual's welfare in comparison with other groups within society, especially when it manifests in the inequality of income measures through the Gini-coefficient (Greig et al., 2007, pp. 30-35).

Adopting the theoretical framework discussed in Chapter I, this chapter examines the link between educational outcomes as presented in Chapter III, IV, V and economic development in Cambodia and Uganda. This chapter is divided into four sections. The first section begins with an examination of the progress of economic development in terms of GDP (per capita), poverty, and inequality in Cambodia and Uganda since the ends of their civil wars. Second, it explores the underlying causes of these development outcomes, focusing especially on the role of education. Third, it compares the development trajectory between Cambodia and Uganda after the end of their civil wars to the present. As such it offers two levels of comparison. The first level traces the economic development of each individual country over time, beginning at the end of each civil war. This allows us to understand the trajectory of each country. The second level compares economic development outcomes and the roles of education in contributing to these outcomes in both countries. This dissertation recognizes the multi-dimensionality of the causes of economic development. The list of causes of economic development and lack thereof is long (Sachs, 2005; Easterly, 2006; Collier, 2007); however, this dissertation intends to make a contribution to this issue by examining the relationship between education, economic development, and its concomitants—equality, poverty reduction, and the

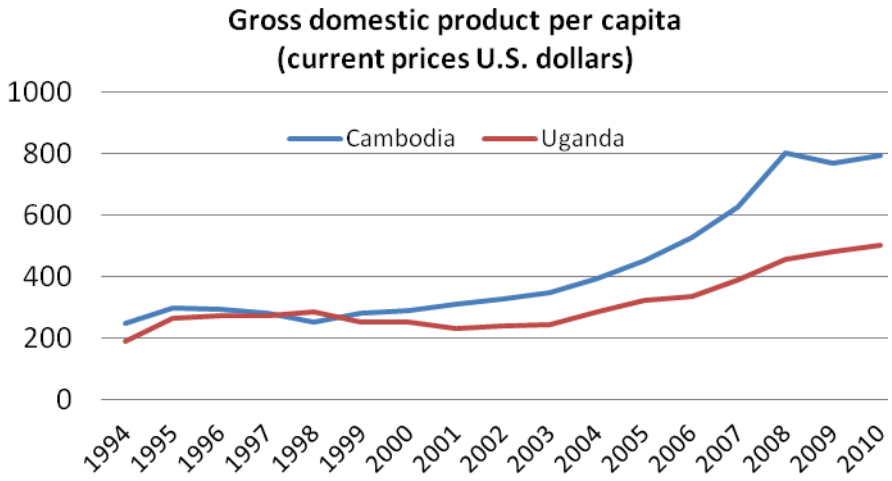
low level of GDP per capita. This permits us to compare Cambodia and Uganda, which may provide policy lessons for each country about the relationship between education and economic development. The final section is the concluding remarks.

VI.2 Economic development performance in Cambodia and Uganda

When Yoweri Museveni's government in Uganda and the first coalition government of Cambodia led by CPP and FUNCIPEC assumed power in 1986 and 1993, respectively, they inherited shattered economies with infrastructures destroyed by decades of civil wars and social upheaval. Although Uganda ended its civil war a few years earlier than Cambodia, the major economic reform programs introduced by the donor community were implemented in both countries in roughly the same period, the early 1990s. The application of these programs, although still leaving many problems, resulted in positive trends.

In this sense, viewed in historical perspective, the past decades have been the most fortunate for both Cambodia's and Uganda's post-colonial histories because not only was peace and political stability achieved, but most importantly there has been significant progress in almost every aspect of their societies, especially their impressive economic growth. Between 1994 and 2008, the economies of Uganda and Cambodia grew at an annual average of nearly 7 and over 8 percent respectively. This sustained economic growth also contributed to the increase of their GDP per capita, as seen in Figure 6.1. In real terms, however, their GDP per capita was still low enough to classify them as low-income countries. The level of the Human Development Index for both countries is also low. In 2010, Cambodia and Uganda were ranked 124 and 143 among the 169 countries that fall under the classification of least developed countries.

Figure 6.1 GDP per capita growth in Cambodia and Uganda



Source: IMF, World Economic Outlook Database

Further, when using poverty and inequality as indicators for development, there is concern in Cambodia and Uganda. Although the sustained economic growth in the past decades contributed to the poverty reduction, as seen in Table 6.1, the level of poverty has declined slowly and poverty remains high compared to other countries with the same growth rate such as Indonesia, Malaysia, and Thailand in their early stages of development (Petri, 1991; World Bank, 1993). Table 6.1 indicates that about one-third of the population in both countries still lives below the national poverty line.[80] Further, a poverty profile in Cambodia and Uganda reveals that the majority of the poor lives in rural areas and engages mainly in agricultural work. Inequality of income/consumption measures in terms of the Gini-coefficient[81] in Cambodia and Uganda is also widening. In Cambodia, it increased from.35 in 1993-94 to.40 in 2004, and in Uganda, it increased from.365 in 1992-93 to.428 in 2002-03 (World Bank, 2007a; UBOS, 2009b).

[80] The national poverty line is measured by a combination of food consumption and necessary non-food minimum allowance for basic daily needs.

[81] The value of 0 signifies a state of perfect equality and 1 perfect inequality.

Table 6.1 Poverty trends in Cambodia and Uganda

Poverty headcount ratios at national poverty lines (percent of population)					
Cambodia	Year	1993-94	1997	2004	2007
	National	47	36.1	34.7	30.1
	Urban	24	-	13	-
	Rural	43	-	34	-
Uganda	Year	1992-93	2000	2002-2003	2005-06
	National	56	35	38.8	31.1
	Urban	27.8	9.6	12.2	-
	Rural	59.7	37.4	41.7	-

Source: MoP, 2006; World Bank, 2006b; 2007b; Ssewanyana and Muwonge, 2004

VI.3 Economic development: The role of education

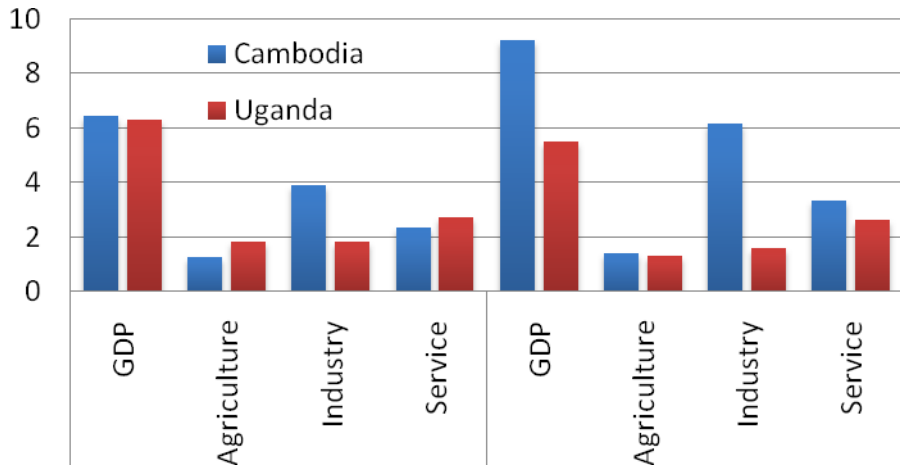
The slowness of poverty reduction, the widening inequality, and low GDP per capita in Cambodia and Uganda amidst high and sustained economic growth in the last two decades challenge a wide-spread belief among development scholars and practitioners that a stable macro-economy, which is considered necessary to attract private investment and sustain the high growth rate, causes rapid poverty reduction, narrows inequality, and increases GDP per capita (World Bank, 1995a, p. 1). Thus, it is necessary to examine the source and quality of each country's economic growth over the past two decades in order to explain the phenomenon of slowness of poverty reduction, widening inequality and low GDP per capita in Cambodia and Uganda.

The sustained GDP growths in Cambodia and Uganda during these periods shared a similar characteristic in that their growth was not derived from well-conceived development strategies and the overall improvement in productivity, especially in the case of Uganda, but from exogenous factors such as the return to normal economic activity when peace and security were reinstalled, and an inflow of foreign aid and economic reform programmes — macroeconomic stability and economic liberalization — were massively supported by the donor community.

The lack of well-conceived development strategies is reflected in the urban bias pattern of economic growth in both countries, driven by industry and the service

sector, as seen in Figure 6.2. In Cambodia, the industry, especially the garment sector, tourism, and construction, which were the sources of economic growth in the past decades, are heavily concentrated in and around the four urban centers of Phnom Penh, Kompong Som (Sihanouk Ville), Kandal, and Siem Reap provinces and a few other urban areas. In Uganda, many of the newly established businesses are small firms, and the majority of these new firms are located mostly in the western and central parts of the country, such as Kampala, Wakiso, Mbale, and Mokono districts and few other urban areas that accounted for 70 percent of all formal employment in 2001-02 (Lundström and Ronnås, 2006b). These patterns of development have two consequences: widening inequality and slowness of poverty reduction.

Figure 6.2 % of sectoral share to % of GDP growth



Source: World Bank 2007b; Asian Development Bank 2009

Urban-biased development towards industry and the service sector reinforces and widens inequality. This is because the monthly wages in urban areas are higher than those in rural areas, and monthly wages in the service and industry sectors that locate mainly in these urban areas are much higher than agricultural-related employment in rural areas, as seen in Table 6.2.

Table 6.2 Monthly wages by location and type of employment in Cambodia and Uganda (US$)[82]

Cambodia (Average)		Uganda (Median)	
Rural	31.20	Rural	14.00
Urban	50.00	Urban	45.00
Utilities	58.50	Legislations, senior officials and manager	60.00
Services	35.00	Professionals	125.00
Construction	40.75	Technicians and associate professionals	74.00
Manufacturing	48.50	Service workers and shop and market sale	25.00
Agriculture, forestry, fisheries	31.25	Agriculture and fishery workers	13.60
Transport, storage, communication	42.25	Crafts and related trade workers, plant and machine operators and assemble	45.25
Trade	42.00	Clerks	40.00
		Elementary occupation	11.75

Source: UBOS, 2006b; Godfrey et al., 2001

The industry and service sectors that are the sources of economic growth in Cambodia and Uganda so far are not only biased against rural areas, but also biased against the illiterate and under-educated, as formal wage employment requires some sort of high level education. Empirical studies in both Cambodia and Uganda found a positive correlation between the levels of education and income inequality. The higher wages are found among workers with higher levels of education, as seen in Table 6.3.

[82] The same exact data is not available in Cambodia and Uganda. However, from the fieldwork in Uganda and Cambodia, I believe that the available data shown in this table is more or less comparable. For a better view of comparison, the monthly wage in this study is converted to US dollars based on $1 equivalent to 4000 Cambodian riels and 2000 Ugandan Shillings (the rate that was stable during the fieldwork).

Table 6.3 Monthly wage employees by levels of education in Cambodia and Uganda (US$)

Cambodia (Average)		Uganda (Median)	
Primary or less	33.50	No education	9.80
Lower secondary	38.50	Primary education	14.70
Upper secondary	48.00	Secondary education	35.60
Higher education	60	Higher education	89

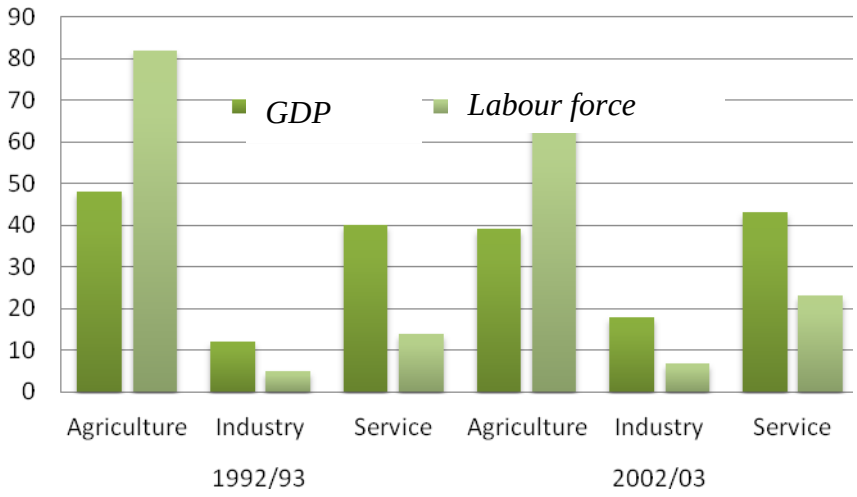
Source: Obwona and Ssewanyana, 2007; Godfrey et al., 2001

In Cambodia, even in the case of a labour-intensive industry, the garment sector, the World Bank (2006a) argues that, 'While the phenomenal growth of the garment sector has benefited many rural households, these have not necessarily been the poor households and very rarely the poorest. [Because of] the lack of education … to secure one of these jobs has meant that poor households in remote areas have not been the major beneficiaries' (p. viii). This situation benefits richer individuals the most, since they have better educations than the poor, a condition that partially maintains income inequality, if not totally contributing to the widening of inequality.

The industry and service sectors that are the sources of economic growth in Cambodia and Uganda also led to slow poverty reduction as the majority of the poor live in rural areas and are mainly engaged in agricultural related work. From the available data in Table 6.1, we notice that urban poverty was reduced much faster than that in rural areas. In Cambodia, between 1993-94 and 2004, the number of people who lived below the poverty line in urban areas was reduced by almost half, compared to less than one-quarter in rural areas. In Uganda, between 1992-93 and 2002-03, the number of people who lived below the poverty line in urban areas was reduced by more than half compared to less than one-third in rural areas.

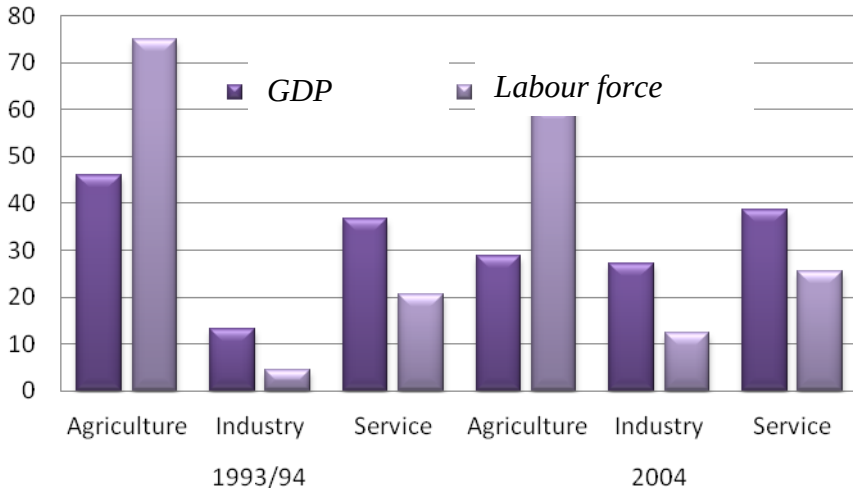
The slow poverty reduction in rural areas in both countries is also a result of low productivity. The high percentage of the labour force employed in agriculture and its low share in percentage of GDP growth (as seen in Figure 6.3 and 6.4) are a manifestation of low productivity compared to other sectors in absolute terms as well as compared to their potential and to other countries.

Figure 6.3 % of the sectoral share to GDP and the labour force by sector in Uganda



Source: World Bank, 2007b

Figure 6.4 % of the sectoral share to GDP and the labour force by sector in Cambodia



Source: ADB, 2009

A typically low productivity can be observed in the following example. In Uganda, average yields of maize, a main food crop, are no more than 1.7-1.8 tons per hectare, which is estimated to be less than a fourth of the possible potential production. In Cambodia, paddy yields averaged a mere two tons per hectare between 2002 and 2004, in contrast to 4.7 tons in neighbouring Vietnam and in Indonesia and 6.2 tons in China (Lundström and Ronnås, 2006b; Agrofood Consulting International and CamConsult, 2006). Further, there is minimal value-added in agriculture as most farmers are self-subsistent and small scale with low productivity and little

downstream process industries to support this sector (Dean and Joiner, 2007, p. 2). The majority of their agricultural exports are in raw product. Consequently, the value added in agriculture in Cambodia and Uganda is only about half the average of developing countries, which is US$600 (FAO, 2004).

In Cambodia's case, Lundström and Ronnås (2006a) argue that 'the lower productivity rather than absolute shortage of work would seem to be the main source of inadequate income, thus remains within poverty trap' (p. 24). This is reflected in the low rate of open unemployment, especially in rural areas, as seen in Table 6.4. In Cambodia, in 2001, the official unemployment rate was only 1.7 of the total labour force, while in Uganda the official unemployment rate reached 3.5 in 2002-2003 before it slid to 1.9 in 2005-2006 (Lundström and Ronnås, 2006a; 2006b; AfDB/OECD, 2008; UBOS, 2009b). Such a low open unemployment rate is expected in poor countries such as Cambodia and Uganda, since the majority of people, especially in rural areas, is unable to afford living without jobs, are compelled to engage in any kind of job, even for a few hours per day or week in order to survive.

Table 6.4 % of the unemployment rate among the total labour forces in Cambodia and Uganda

Year	Cambodia			Year	Uganda		
	National	Rural	Urban		National	Rural	Urban
2004	1.7	4.6	9.5	2005-2006	1.9	1.7	12

Source: Lundström and Ronnås, 2006a; 2006b; AfDB/OECD, 2008; MoFPED, 2004

This official rate of unemployment does not reflect the issue of underemployment[83] that not only leads to low productivity for individuals but also to overall low GDP (per capita) at the national level. Underemployment in both countries is very high. In Cambodia, according to a 2000 labour force survey, among 5.3 million of those who engaged in economic activities, 10.42 percent were working fewer than 30 hours per week, and 31.49 percent were available for extra work. In Uganda, the 2002-2003 statistics show that among the total labour force of 9.8 million, 16.9 percent worked

[83] Although there may be different definitions, here a person is classified as underemployed if she or he has worked fewer than 40 hours a week and is willing and available to work more hours.

fewer than 40 hours per week and were available for extra work. However, Nalumansi et al. (2003) argue that there was hidden underemployment as the labour force in agriculture spent only 23 percent of their working hours on agricultural activities. According to this report, the rate of underemployment in rural areas reached 4 million people, which is more than 40 percent. In this case, the underemployment rate in Uganda was even higher than Cambodia. In contrast to the unemployment rate in both Cambodia and Uganda, more rural labour force was underemployed than their urban counterparts, as seen in Table 6.5.

Table 6.5 % of underemployment rate among total labour forces in Cambodia and Uganda

	Cambodia: Employed persons in 2000 (age 10 and above)		Uganda: Employed persons in 2002-03 (age 14-64 and above)
	Working less than 30 hours per week	Available for extra work	Working less than 40 hours per week and available for extra work
	Percentage	Percentage	Percentage
Total	10.42	31.49	16.9
Urban	9.5	15.32	10.4
Rural	10.54	33.62	17.4

Source: NIS, 2001; EIC, 2007; UBOS, 2006b

In Cambodia and Uganda, the low productivity and high rate of underemployment in rural areas in general and in agriculture in particular were not only a matter of inadequate endowment of or access to productive resources such as land, machinery, infrastructure, and other physical capital; the problem also lay within the quality of their labour force measured in terms of education. In Cambodia and Uganda, the majority of the labour forces in rural areas that engaged in agricultural activities suffered high rates of illiteracy and poor levels of educational attainment in comparison to their urban counterparts, as seen Table 6.6.

Table 6.6 Highest education attainment by region in Cambodia and Uganda (percent)

	Rural		Urban	
	Cambodia	Uganda	Cambodia	Uganda
Adult illiteracy	28	35	15	14
No formal schooling	27	22.5	16	8.6
Some primary	39	46.0	29	29.6
Primary	19	13.9	20.5	15.3
Secondary	4.5	7.75	13.75	18.45
University/Post-secondary	0.1	2.1	6	9.7

Source: UBOS, 2006b; NIS, 2009

In Uganda, available secondary data show that crop yields are low despite the availability of productivity-enhancing technologies on the market (Nabbumba and Bahiigwa, 2003). Although other inputs are available, such as technology and micro-finance, this program benefits those who are literate. Illiterate and semi-illiterate farmers — a product of low quality schooling (as discussed in Chapter IV) — lack skills to use such services and hence cannot access advanced methods that could have improved their livelihoods (Oxenham et al., 2002). A study by Nabbumba and Bahiigwa, (2003) shows that farmers with no education had the lowest level of profits per hectare compared to those with formal education, especially those with TVET.

A similar conclusion can be made for Cambodia. Among other factors, the lack of skilled human resources is a key constraint to the development of an increasingly modern and diversified agricultural sector. Although Cambodia has a low proportion of arable land under irrigation and low technology, the World Bank (2004b) argues, 'Even if the Cambodian economy adopts the path dictated by its underlying comparative advantage, the low supply of skills is likely to be a constraint as the use of irrigation and modern farming technologies require skilled workers' (p. 102). Field observations also note that the low level of education in rural areas also affects the capacity to maintain the established infrastructure, which in turn will serve as a barrier to productivity improvement and be a waste of resources and efforts as the same infrastructure is recreated several times.

The low student enrollment in agriculture, as discussed in Chapter V, in both countries also limits the expansion of Research and Development and each government's ability to expand the extension service in agriculture to improve the productivity among farmers as experienced by newly industrial countries in East Asia. In Cambodia, EIC (2006, pp. 9-10) reports that a lack of cropping know-how is very common among farmers, particularly in such areas as seed preservation, application of fertilizers and pesticides; even handling of machinery as training by the Ministry of Agriculture, Forestry and Fisheries has only reached a small portion of the population because of the lack of extension officers. The report estimates that in the whole country there are roughly 500 extension officers in the agriculture sector. In Uganda, there is also a report that the lack of extension service is a constraint on productivity improvement (Nabbumba and Bahiigwa, 2003).

In Cambodia and Uganda, comparing sectoral output in terms of labor productivity, industry is the most efficient sector where 12.3 and 4.2 percent of the labor force produces 27.55 and 24.6 percent of the economy's output, respectively (as seen in Figure 6.3 and 6.4). However, their productivity and their potential are still low compared to other countries. Cambodia's and Uganda's industry value added are, respectively, only US$.253 and.227 per US$1 of GDP, compared to Vietnam, which is.41.[84] This is reflected in Vietnam's higher value added in manufacturing per capita and as a percentage in GDP higher than Cambodia and Uganda, as seen in Table 6.7.

Table 6.7 Value added by manufacturing in Cambodia, Uganda, and Vietnam

	Manufacture, value added per capita US$ (Constance price 2000)			Manufacture, % share of value added in GDP		
	Cambodia	Uganda	Vietnam	Cambodia	Uganda	Vietnam
2000	44.5	22.4	74.1	16	8.9	18.6
2005	75.8	25.8	120.3	19.9	9.2	22.5

Source: United Nations Industrial Development Organization, 2009

[84] Retrieved 9 December 2010 from http://www.nationmaster.com/graph/ind_val_add_cur_us_pergdp-added-current-us-per-gdp

The low productivity in agriculture and the non-farm sector in Cambodia and Uganda is the cause of their low GDP per capita compared to Vietnam. By 2010, GDP per capita (at current prices) in Vietnam was US$1162 compared to Cambodia and Uganda which were only US$822 and US$470, respectively.[85]

This typical low productivity can be observed in the following example. In non-farm sectors, a study shows that under the current production technology, Ugandan firms are producing at 50 percent lower than optimal levels of output. In Uganda, the micro, small and medium enterprise survey indicates that access to appropriate technology, followed by low skills and the low educational level of the available labour are the most pressing internal constraints that make it difficult, if not impossible, for them to develop their productive capacity, maximize their competitiveness and contribute to sustainable economic growth (AfDB/OECD, 2008; Lundström and Ronnås, 2006b). In Cambodia, the Garment Industry Productivity Center's combination of training and consulting programs helps clients achieve significant improvements in their productivity often by as much as 15 to 20 percent (HR Inc. Cambodia and Garment Industry Productivity Center, 2008). This means that low productivity is the result of the inefficient and ineffective use of existing capital.

The inefficient and ineffective use of existing capital in Cambodia and Uganda, which leads to low productivity in the non-farm sector, does not result from a lack of schooling/low educational attainment among the labour force as the majority of wage earners in non-farm sectors hold secondary and post-secondary education, as seen in Table 6.8. Rather, low productivity is due to the lack of workers with the right skill sets and quality.

[85] World Economic Database. Retrieved 12 April 2011 from http://www.imf.org/external/pubs/ft/weo/2008/01/weodata/weorept.aspx?sy=2006&ey=2010&scsm=1&ssd=1&sort=country&ds=.&br=1&c=522percent2C746percent2C582&s=NGDPDPC&grp=0&a=&pr1.x=22&pr1.y=9

Table 6.8 % of labour forces by educational levels in wage employment in Cambodia and Uganda

Uganda		Cambodia	
No formal schooling	4.17	No formal schooling	2
Primary	8.15	Primary incomplete	5
Secondary	21.4	Primary complete	15
Post secondary	66.98	Lower secondary	32
Do not know	21.87	Upper secondary	52
		University	82

Source: UBOS, 2006b; World Bank, 2007a

While an increase in productivity can be attributed to several factors such as physical capital and size of labour force, the quality of the labour force in terms of relevant skills is the most important factor. Gary S. Backer argues, 'Of course, machines and other physical capitals are important, but alone they are far from sufficient to produce growth because skilled workers and managers, and innovative entrepreneurs, are needed to operate complicated machinery to produce efficiently, to develop new products and process and to utilize innovation from other countries' (Backer 2002: 5-6). In Cambodia and Uganda, there is a deficit in skilled labour evident in the high returns offered to skilled labour, and the increase in recent years signifies that there is a need for more skilled labour. However, the wage differentials in Uganda are larger than in Cambodia, indicating that it faces a greater shortage of skilled labour than Cambodia. In Uganda, the wages for workers with secondary and higher education are 3.6 and 9 times higher than for workers with no formal education, while in Cambodia it is only 1.43 and 1.80 times respectively (as seen in Table 6.3).

The shortage of skilled labour is also reflected in the difficulties faced by employers in recruiting the right employees. In Uganda, there was an increase in the re-advertisement of jobs in the three leading newspapers from 66 in 2003 to 1712 in 2004. Also, more than 10 percent of employers reported having difficulty in recruiting graduates with desirable skills, especially in the fields of human medicine, engineering, information technology, and mathematical science; and 68 percent of construction companies reported having problems finding appropriate employees

beyond manual work (Obwona and Ssewanyana, 2007; Semwogerere, 2010, p. 15). In Cambodia, there was an increase in the time it took to fill a vacancy for a skilled worker from 4.2 to 11.7 weeks. In the late 2000s, a survey of employers' needs and young people's skills found out that 76 percent of youth did not have the right skills sought by employers (World Bank, 2009; Chan, 2008).

Another factor is that the private sector in both countries hires a substantial percentage of expatriate workers to supplement the limited internal skilled labour force. In Cambodia, in the garment sector, particularly in the Production Department, all of the highest two level positions are occupied by expatriates, and 50 percent of expatriates are employed at the top four levels (HR Inc. Cambodia and Garment Industry Productivity Center, 2008). In the tourist sector, the same trend is found. In an interview with a human resource manager, he estimated that over 60 percent of the top management positions are held by expatriates (interview, 4 September 2008).

In Uganda, in 2003, a study of foreign private firms reports that 23.9 percent of managerial/supervisory, 6.12 percent of administrative/accounts and 2.5 percent of skilled/technical posts are held by foreign nationals (UBOS, 2006a).[86] The World Bank's (2007b) report also notes that there is a significant immigration of consultants and skilled workers, especially in telecommunications, engineering, and banking. In other words, there is a widening gap between educational preparation and actual employment opportunities as the demand for skilled labour forces is not fulfilled by graduates from the education system, a situation that has existed since independence (Odaet,1990). Table 6.9 shows the mismatch of graduates in selected sectors in Uganda. This is a reflection of the lack of labourers to participate in critical economic activities to foster the economic growth.

[86] It is important to note that the size of the Cambodian industry is bigger than Uganda and the majority of its exports are industrial (garment) products, while the majority of Ugandan exports are (raw) agricultural products. This explains why expatriates dominate the top level positions in Cambodia as the products need to meet international quality standards.

Table 6.9 Mismatch between the supply and demand of graduates by sector in Uganda

	Supply	Demand	Lack of supply	Mismatch ratio
Agriculture	210	3743	3533	17.8
Industry	2175	4685	2510	2.15
Health	615	3968	3353	6.45

Source: ESAURP, 1993

In his report on Uganda tertiary education sector, Liang (2004) also finds that, 'The higher education curriculum in Uganda is outmoded and irrelevant to the needs of the current economy, with much of it being centrally determined, specialized, and often theoretical' (p. 5). This concern is also shared by graduates: 'The breakdown of weaknesses identified by graduates shows that curriculum issues are in fact of greatest concern … nearly one-third of all weaknesses related directly to the lack of relevance of undergraduate degree programmes, which are widely regarded as being too theoretical with not enough job-related practical training' (Kirumira and Bateganya, 2003 , p. 41). An empirical study in Uganda by Obwona and Ssewanyana (2007, p. 14) also found that under-supply of higher education graduates in critical areas, especially in science-based areas, contributes partly to limited growth of the economy. This is because the shortage of these skilled workers hinders industries' ability to increase productivity and diversify economic activity.

Further, there is a growing concern about the low quality of education in both countries. An education specialist noted that this concern is not only about inappropriate skills, but also about the quality of education (Phnom Penh Post, 2008). In the construction sector, Cambodians serve only as manual labourers and low-skill workers, and most of the highly skilled workers and engineers are foreign nationals. Worse, one educational specialist notes that at present Cambodian 'engineers' are the guys digging holes in the mud, while actual engineers (from other countries) are ensconced in air-conditioned offices running the engineering projects (Walter, 2002).

In both countries, disaggregated results reveal that appropriate advanced education among the labour force is an important factor for improving firm efficiency (Lundström and Ronnås, 2006a, 2006b; AfDB/OECD, 2008). As discussed in Chapter

V, the critical disciplines needed by the current Cambodian and Ugandan labour markets and economies for their national development as well as for productivity improvement are technical and vocational education and training and higher-education-focused natural science, engineering, manufacturing, construction, and technology. However, in Cambodia and Uganda, these disciplines are underdeveloped, as discussed in Chapter V. The availability of technical and vocational education and training is very limited, and the majority of higher education institutes offer mainly humanities, arts, and social sciences and only a few offer degree-levels in the natural sciences, technology, manufacturing, construction, and engineering. In Cambodia as well as in Uganda, slightly over 20 percent and less than 20 percent respectively are enrolled in these disciplines, compared to Singapore and Malaysia where over 40 percent of students are enrolled in these disciplines.[87]

The lack of relevant and qualified skills for labour market needs also results in unemployment among graduates. In Cambodia as well as in Uganda, people with higher levels of education are more likely to be unemployed than people with lower levels of education. In Uganda, Obwona and Ssewanyana (2007, p. 7) found that the unemployment rate among diploma/degree holders was well above the national average, while the average national unemployment rate was 2.9 in 2002, and the unemployment rate among tertiary graduates was 7.4 percent. Data on unemployment in Cambodia according to levels of education is not available, but anecdotal evidence indicates that the same trend is happening as the percentage of unemployment rate is actually slightly higher in the richest households and among young graduates. The unemployment rate among youth 15-24 in Cambodia is 71.9 percent of the total unemployment rate (Morris, 2007). Uganda has slightly higher youth unemployment than Cambodia, at 83 percent (Kalyango, 2009).

Local observers have noticed that the situation is more serious than the official data indicates. 'Of over 30,000 university graduates who pass out annually in Uganda, just a handful of them get sucked into the small and competitive job market, leaving the biggest percentage to walk the streets in ceaseless search of employment

[87] UNESCO, Institute for statistics. Retrieved 29 October 2009, from http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx

opportunities' (Echwalu, 2010). In Cambodia, in 2005, only one out of nine graduates was able to find a job after one year of finishing university, and this changed to one in ten in 2008 (Hagenlocher and Sam, 2006; Ros, 2008).

Further, the unemployment rate is higher in urban areas that have a lower poverty rate than in poor rural areas, as seen in Table 6.4. This pattern is expected since they can afford to wait for the job of their choice and suitable to their level of education, while relying on their families for support. These data suggest that unemployment and economic inactivity are luxuries that richer households can better afford (Lundström and Ronnås 2006a, 2006b). This might be caused by personal and family aspirations due to the socio-cultural bias towards white-colour jobs and payment policies that favour white-collar jobs over manual and technical skilled workers, especially in Uganda. Although this is not a serious problem for these unemployed individuals, it is a waste of resources that could have been utilized to contribute to economic growth. Most importantly, it is a sign of the inability of the education system and the government's policy to produce and encourage the types of human capital needed to promote economic growth.

The low level, unqualified and inappropriate education among the labour force hinders not only their ability to increase productivity through effectively and efficiently using their existing physical capital, but also hinders their efforts to diversify their economic foundation. Experiences in newly industrialized countries in general, and in South Korea and Singapore in particular, reveal that strategic planning in the education sector is key among other factors, such as macro-economic policy and investment climate that account for their industrial transformation and thus the development of their countries. In other words, education laid the foundation for macro-economic policy and investment climate returns (Lee, 1994; Seng, 2008). While South Korea and Singapore could eliminate illiteracy and rapidly improve the level of skilled labour within less than two decades, Cambodia and Uganda have been unable to achieve those goals within a similar time frame. The illiteracy rate in both countries remains high, as presented in Chapter III. In both countries, there is a shortage of skilled labour, as discussed earlier, and in some job categories no skilled

workers are available (Wirak, 2003; UNDP-Cambodia, 2009). Consequently, there is no significant structural economic transformation in Cambodia and Uganda.
This is reflected in the high percentage of the labour force employed as unpaid family workers. The percentage of unpaid family workers in Cambodia and Uganda accounts for 41 percent of total employed workers, a figure that is very high compared to Thailand, which is only 19.4 percent (Imai, 2000). This rate is also very high compared to their paid workers, which are only 23 percent in Cambodia and 16 percent in Uganda (NIS, 2010a; MoGLSD, 2006). The slow economic transformations in both countries are also reflected in the critical roles of agriculture in their economies in terms of its percentage share of GDP and the labour force it employs, as seen in Figure 6.3 and 6.4. In Cambodia and Uganda, although the labour force employed in agriculture declined from 75 percent and 80 percent in the early 1990s to 60.5 percent and 75 percent by mid-2000 respectively, the agriculture sector remains by far the most important sector for employment in both countries (Lundström and Ronnås 2006a; 2006b; ADB, 2009; Republic of Uganda, 2010). The same is true for the agricultural share of GDP. Although between 1990-99 and 2000-05 in Cambodia and Uganda the percentage share of agriculture in GDP declined from 43.72 percent and 46.4 percent to 30.08 percent and 33.8 percent respectively (World Bank, 2007b; ADB, 2009), the agricultural share remains significantly high compared to Thailand, Malaysia, and Indonesia, which are around 10 percent (ADB, 2010a; 2010b; 2010c).

A study by the Uganda National Commission for the African Peer Review Mechanism (2007) argues that the economic growth in Uganda

> is not based on any fundamental improvement in the basic economic structure, and the inherited colonial economy has persisted. There has been no deconstruction of the economy and therefore no restructuring has taken place. Little has changed in the relative importance of the agriculture, industrial, and other sectors of Uganda's economy. Agriculture remains by far the most important sector. (p. 35)

In Uganda, during the 1990s, more than 90 percent of its exports were agriculture products, of which over 60 percent was coffee. Although since 2000 the share of

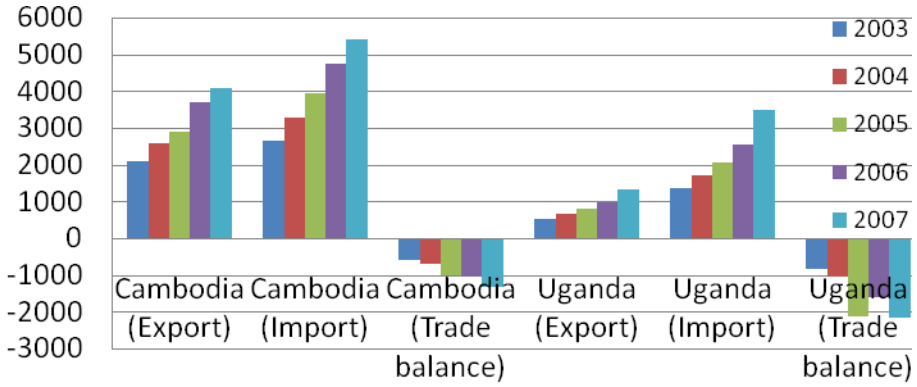
coffee to the total exports has decreased steadily, it remains the main foreign exchange earner. In recent years, even though there is an increase in non-traditional exports, almost all of its export goods consisted of agricultural products with virtually no manufactured goods, and, therefore, no value-added to the primary commodity (World Bank, 2007b).

In Cambodia, in the early 1990s, timber represented a significant share of overall exports, over 40 percent, with the next largest share being rubber at only 5 percent. Since the late 1990s, the Cambodian economy has been transformed; its exports have shifted from a reliance on agriculture to industry. However, so far it still depends on a single product, garment manufacturing. Indeed, the share of garment exports to total exports between 1997 and 2000 doubled. The value of textile and garment exports almost doubled in just one year; the period between 1999 and 2000 reached nearly 80 percent of total exports (Beresford et al., 2004, p. 123). Before the economic crisis in 2008, more than three-fourths of Cambodia's exports were garments and textile products. However, the garment industry in Cambodia involves only 'cut, make and trim', a process that does not involve the local supply of material, except labour. Consequently, it does not generate links to other economic activities such as the fabric industry that not only generates more jobs, especially in rural areas, but also helps Cambodia to move up the value-production chain.

Further, this situation has created a pattern of trade dominated by primary agriculture products in Uganda and garment manufacturing products in Cambodia. Consequently, their economic foundation is narrow and vulnerable to external shock. Although this situation is not a threat, the increase in trade deficit over time (as seen Figure 6.5) in Cambodia and Uganda is worrisome. This trade deficit is mitigated by external assistance. This situation makes Cambodia and Uganda heavily aid-dependent countries. Between 1993-2007, on average the annual aid flows to Uganda and Cambodia were US$533 and 274 million respectively. Over time, aid flows to both countries have increased. Between 2007-2009, aid flows reached over US$700 million, and nearly 2 billion in Cambodia and Uganda respectively.[88]

[88] World Bank, data. Retrieved 20 April 2010, from http://siteresources.worldbank.org/CFPEXT/Resources/299947-1266002444164/index.html. It is also

Figure 6.5 Trade balance in Cambodia and Uganda (US$ million)



Source: ADB, 2008; Uganda Bureau of Statistics, 2008

Moreover, the lack of appropriate qualified labour forces also determines the faith of their future economies as they are unable to transform their economic structures, and also weaken the ability to adopt a strategy of export-led industrialization based on skilled and semi-skilled labour forces as experienced by successful East Asian countries. In developing countries where there is a lack of local capital, Foreign Direct Investment (FDI) is the key to structural transformation, export-led industrialization. The impact of FDI on development is well documented during the last three decades. FDI will contribute not only to increases in fixed capital formation, but also offer opportunities for the host countries for technology transfer and technological adaptation or receiving spill-over effects from foreign firms, which in turn contribute to productivity, growth, and diversification. Therefore, the economy will grow faster and the economic foundation will be stronger (Te Velde and Morrisey, 2004).

Although macro-economic stability, policy consistency, incentive packages, and cheaper labour are important to attract FDI, foreign firms also look at the availability of skilled workers in the potential host countries capable of modern technology and sophisticated production. Although low direct labour costs influence location

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important to note that recently China has played an increasingly important role in Cambodia and Uganda, especially in the fields of infrastructure development and the extracting industry. However, it is still too early to assess its wider economic development impact at large (Long, 2009; Burgos and Ear, 2010; Gill, et al., 2007; Lee, 2007).

decisions of FDI, labour costs are not as important as is commonly believed. In fact, the importance of low-cost unskilled labour on location decisions has declined in recent years, and greater emphasis is now placed on the skills and trainability of workers. Moreover, in many industries direct labour costs now account for roughly 10 percent of manufacturing costs, and the share is even smaller in some industries.

The need for more skilled workers is also due to changes in the nature of FDI. Today foreign firms search not only for agricultural or mineral resources, but multinational corporations transfer ever more sophisticated production lines and even set up whole industries in developing countries, not just labour intensive ones as before (Obwoma, 2001, p. 62; Johanson and Adams, 2004). In the global economy where countries compete with each other for markets, foreign investment, technological development, and hosting multinational corporations, the quality of a workforce becomes increasingly important. This is because the employer believes that skilled workers are more readily able to adopt existing knowledge and processes.

In Cambodia today, businesses have good opportunities as the country is situated in a region with a high rate of economic growth. Many employers, from small enterprises to large companies, have plans to expand their operations and invest in new industries. However, their plans have been largely hindered by a gap in Cambodia's labour market (Phnom Penh Post, 2008). Business surveys in Cambodia and Uganda show that an 'inadequately educated work force' is considered to be the third most severe constraint on doing business. There are grounds to expect that shortcomings in education and skills will lead to severe restrictions to growth in Cambodia and Uganda as businesses grow in size and sophistication (Lundström and Ronnås, 2006a; 2006b).

Even with a more educated labor force compared to other parts in the country, Phnom Penh scores particularly poorly in two areas compared to other cities around the globe; number one is talent development, and number two is the level of education. David Carter, CEO of one private company in Cambodia, complains 'recruitment can be a real headache in Phnom Penh for industries that require skills beyond manual labour … and this leads to income inequality as the lack of employable locals either

means bringing in foreigners or paying overly high salaries for staff compared to their equivalents in other countries' (Finch, 2010, p. 41). Kim Byung Gwan, director of the International Development Cooperation of the Republic of Korea in Cambodia suggests that Cambodia should improve its human resources in order to attract more Korean investment, in addition to improvements in technology and the infrastructure (Reaksmey Kampuchea, 2008).

Consequently, Cambodia and Uganda attracted less FDI than Vietnam, as seen in Figure 6.6 and 6.7, which in turn limited the increase of their fixed capital formation compared to Vietnam, as seen in Table 6.10. The different level of FDI in Cambodia and Uganda compared to Vietnam is due, among other factors, to the difference in human capital measured in terms of education. N. Q. Thai (1997) notes that the ability to attract foreign investors to Vietnam is important because it has an advantage in its ready contingent of skilled workers. Vietnam not only has a higher level of education among its labour force, but also among its skilled labour force — measured in terms of the enrollment of tertiary students in science and engineering, manufacturing and construction. Data on student enrollment in science in Vietnam is not available, but enrollment in engineering, manufacturing and construction alone was 19.78 percent in 2003, which is higher than the combination of science and engineering, manufacturing and construction in Cambodia and Uganda, which in 2004 was only 18.74 percent and 10.45 percent respectively.[89] Further, the percentage of the labour force with TVET qualifications in Cambodia and Uganda is substantially low compared to Vietnam. While Vietnam has almost 20 percent of the labour force with TVET qualifications,[90] the figures in Cambodia and Uganda are only 1.1 percent and .3 percent respectively, as presented in Chapter V.

[89] Retrieved 8 December 2009, from http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx

[90] Retrieved 2 June 2010, from http://www.tvet-vietnam.org/tvet%20in%20vietnam_brief%20overview_080908.pdf.

Figure 6.6 FDI in Cambodia, Uganda and Vietnam (inward flow: million dollars)

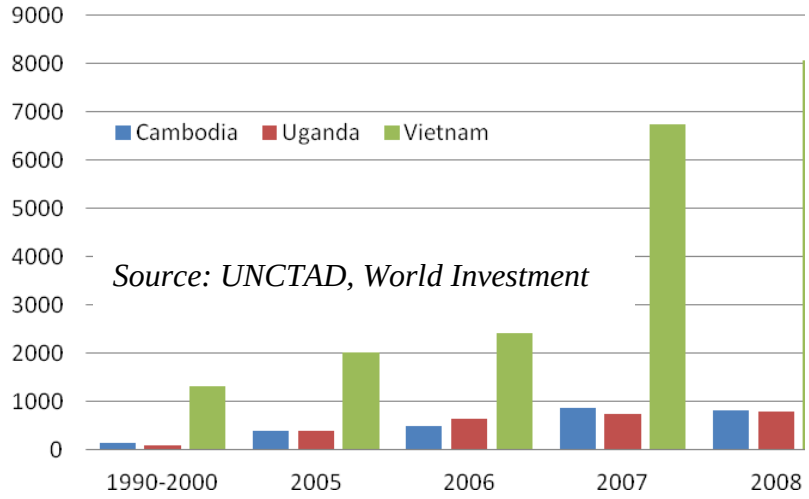


Figure 6.7 FDI stock in Cambodia, Uganda and Vietnam (inward flow: million dollars)

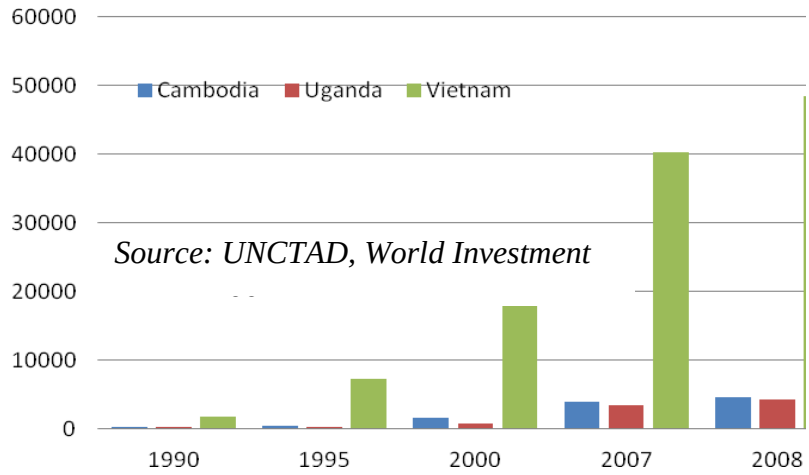


Table 6.10 Fixed capital formation as a percentage of GDP in Cambodia, Uganda and Vietnam

	Uganda		Cambodia		Vietnam	
Year	1992-.93 to 1996-97	1997-98 to 2004-05	1993-1998	1999-2006	2000	2007
percent	17.2	15.9	13.01	18.54	27.7	37.1
percent of change	- 1.3		+ 5.53		+ 9.4	

Source: World Bank, 2007b; NIS, 2007; Retrieved 3 January 2010, from http://data.un.org/CountryProfile.aspx?crName=Vietpercent20Nam

VI.4 Who performs better: Cambodia or Uganda?

It is important to note that since the turn of the millennium, as seen in Figure 6.1, GDP per capita in Cambodia started to gross faster than Uganda. By 2010, Cambodian GDP per capita was almost double that of Uganda. Also, when the poverty headcount ratio at US$2 per day (Purchasing Power Parity) was used, Cambodia had a relatively lower percentage of the population living below this rate at 57.8 percent in 2007 compared to Uganda at 75.6 percent in 2005, which remained unchanegd until recently.[91] Further, between the 1990s and 2000s, from the available data, while Cambodia saw a steady decline of rural poverty, Uganda saw an increase of rural poverty by 4.1 percent. By the early 2000s, the rate of rural poverty in Cambodia was 34 percent compared to 41.7 percent in Uganda (as seen in Table 6.1). This phenomenon followed a divergent path in the whole sub-region between Sub-Saharan Africa and Southeast Asia since the 1980s. As presented in the introduction in Chapter I, common factors, such as better economic institutions, a business-friendly environment, and good governance, do not explain the different economic performances in Cambodia and Uganda. This is because since the end of the civil wars, Uganda scored consistently better in terms of these aspects compared to Cambodia. Therefore, the question should be raised, what causes this difference? Does education play a role in explaining this difference?

In Table 6.7 we note that the value added in manufacturing per capita and as a percentage in GDP in Cambodia is relatively higher than Uganda. This signifies that Cambodian productivity is relatively higher than Uganda. From the available data, the median annual value added per worker in manufacturing in Uganda is only US$1085 compared to Cambodia's, which is US$2700 (Lundström and Ronnås, 2006a; Bargawi, 2005). This is partly because Cambodia has a slightly more appropriate and higher skilled workforce than Uganda, as seen in their higher student enrollment in science and engineering, manufacturing and construction. It should be noted that while Cambodia saw an increase in tertiary students in these fields from 15.1 percent in 2001 to 18.74 percent in 2004, Uganda saw a decrease in enrollment in these

[91] World Bank, data. Rerieved 10 April 2011, from http://data.worldbank.org/indicator/SI.POV.2DAY.

disciplines from 15.02 in 1999 to 10.48 percent in 2004.[92] Also, Cambodia has more student enrollment in technical and vocational education and training compared to Uganda. The annual enrollment in TVET in Cambodia now represents 30 percent of new entrant labour force compared to only 5 percent in Uganda (MoES, 2006a; ADB, 2008b).

This situation attracts more FDI, a pattern that we discussed earlier between the different ability of Vietnam to attract more FDI than Cambodia and Uganda. For example, in 2010 Cambodia was chosen by the Japanese Company Minebea, Co., Ltd. as the launching pad for its future growth. The chief driver of the decision, according to company officials, was the kingdom's improving education system and burgeoning workforce. The decision did not happen by accident or political consideration, but followed three years of researching a number of countries in Asia (James, 2010). Cambodia's slightly higher level of FDI, in turn, contributes to its slightly higher fixed capital formation as a percentage of GDP than Uganda's, as seen in Table 6.9. Further, the quality of Cambodia's investments is also better than Uganda's. In Uganda, the composition of fixed capital formation may no longer be as productive as it was in the recovery period, as the share of machinery in fixed capital formation has declined. In absolute terms, it declined by 1.9 percentage points. It reduced from 5.9 percent to 4 percent between in 1992-93 to 1996-97 and 1997-98 to 2004-05. While in Cambodia, the share of machinery in fixed capital formation increased by 3.58 percentage points. It increased from 3.88 percent in 1993-1998 to 7.46 percent in 1999-2006 (World Bank, 2007b; NIS, 2007).

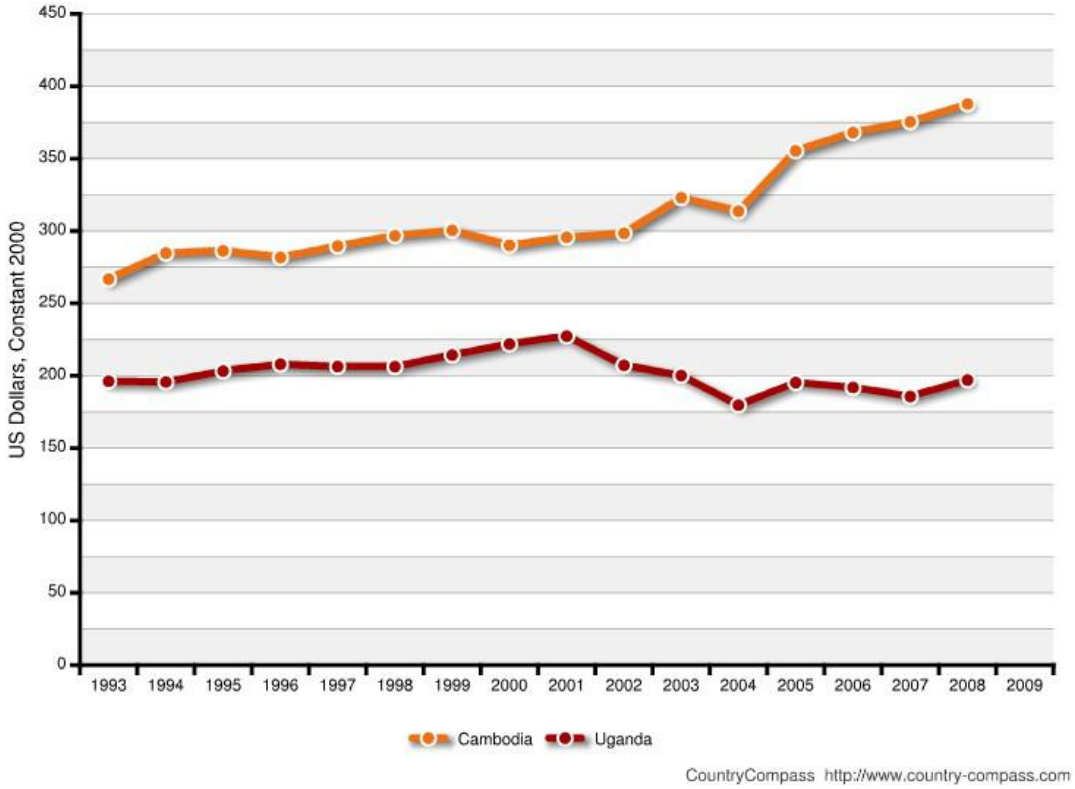
The fall in equipment investment in Uganda could signal a growth concern as the World Bank (2007b) claims, 'Much of the change in economic performance across countries comes from productivity growth, and some theorists attribute the uptake of new productivity-enhancing technologies to investment in equipment rather than structures' (p. 19). This is because machinery and equipment are closely associated with output per worker in economies, along with an appropriate labour force. As a

[92] Retrieved 2 June 2010, from http://www.tvet-vietnam.org/tvet%20in%20vietnam_brief%20overview_080908.pdf

result, Cambodia has a slightly higher value added per worker than Uganda, as presented above.

In agriculture, where the majority of the poor are involved, between the 1990s and 2000s Cambodia was able to increase the percentage of agricultural share to the total percentage of GDP growth by .14 percent amidst a substantial decline of the labour force in agriculture, while Uganda experienced a decrease of the percentage of agricultural share to the total percentage of GDP growth by .5 percent amidst no significant decline of the labour force in agriculture. Consequently, agriculture value added per worker in Cambodia has been slightly higher than Uganda, especially since 2000, as can be seen in Figure 6.8.

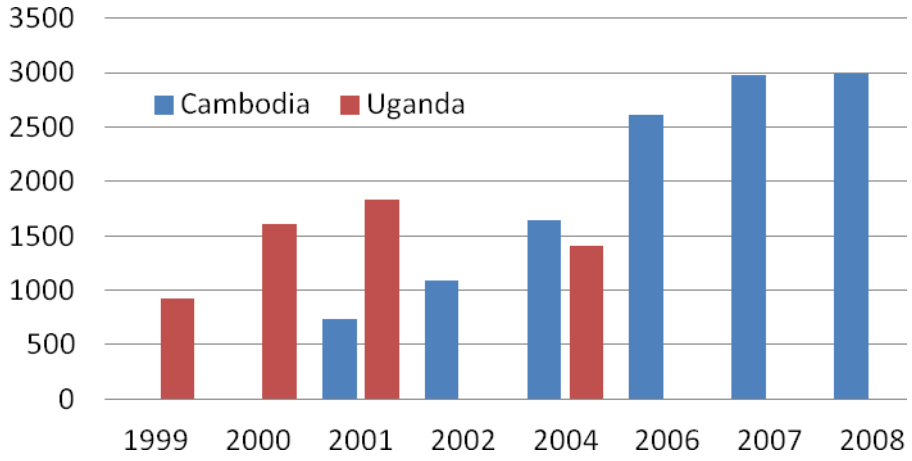
Figure 6.8 Agriculture Value Added Per Worker in Cambodia and Uganda



Although the increase of agricultural productivity in Cambodia is the result of a better use of fertilizer, irrigation and machinery, this can be achieved only when it is accompanied by improvements in human capital in terms of education. And this is true in this case. Since the late 1990s, Cambodia has had slightly higher rural literacy

and tertiary students enrolled in agriculture than Uganda, as presented earlier in Chapters III and V. It is important to note that while Cambodia has improved the situation steadily, Uganda experienced stagnation in literacy rates and even declining enrollment in agriculture, as seen in Figure 6.9. The increase in literacy among the rural population helps them to easily adopt new technologies in agriculture, and the increased tertiary students in agriculture help to increase the number of specialists in the agriculture extension service and research and development, especially among NGOs. These developments contribute to increased productivity, which is also reflected in the different trainings provided to farmers in Cambodia and Uganda. The rural population in Uganda receives limited informal skills training from the TVET system. One report reads: 'The orientation of skilled training has not come up to address skill development initiatives that keep people in rural areas' (Semwogerere, 2010, p. 14). On the other hand, in Cambodia, in addition to the short courses, the MoLVT developed community-based trainings that correspond to the structure of its economy. So far more than 60,000 villagers have received this type of training (Pich, 2008). Anecdotal evidence reveals that rural families who have family members study agriculture are able to move out of poverty through increased productivity, compared to those that do not.

Figure 6.9 Student enrollment in agriculture in Cambodia and Uganda



Source: http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx Access on 8 December 2009

The slightly higher productivity in Cambodia than Uganda leads to its higher GDP per capita. However, the higher GDP per capita in Cambodia than Uganda is attributed

not only to slightly better productivity, but also to its lower population growth. For instance, between 1992 and 2008, population growth in Cambodia declined from 3.41 to 1.54 (NIS, 2010b). While in Uganda, during the same period, population growth increased from 3.42 to 3.6, one of the highest population growth rates in the world (The Population Reference Bureau, 2008). [93] Why does Uganda have a higher population growth than Cambodia? Does education play a role?

International comparative studies as well as studies within Cambodia and Uganda indicate that a close relationship exists between population growth and the level of female education. In other words, high levels of female education are linked to low fertility. In Uganda, a study has indicated that women with secondary education have a fertility rate of only 3.9, while women with no education reach as high as 7.8 (Nannyonjo, 2007). In Cambodia, according to the Cambodia socio-economic survey 2004, women with lower secondary education have a fertility rate of only 1.2 compared to women with no education at 2.8 (World Bank, 2006a). This is because the higher the level of education women attain, the likelihood of their use of modern contraceptives is also higher.

The high population growth in Uganda, therefore, is associated with the failure of education reform, which does not improve the education of women, while low population growth in Cambodia results from a better educational provision for the female population, as discussed in Chapter III. Statistics on adult women with secondary education are not available in both Cambodia and Uganda; therefore, we use the secondary school enrollment rate to supplement this missing data. In 2007, the Cambodian gross female enrollment in secondary school was 15 percentage points higher than that of Uganda. Between, 1999 and 2007, the gross female enrollment in Uganda increased from 8 percent to 21 percent, while in Cambodia it increased from 12 percent to 36 percent.[94]

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[93] Although, population growth may increase the size of the economy and productivity, population growth in Uganda is rather a worrisome sign. The growth is mainly among the poor who lack the necessary means to actively participate in economic activities including appropriate education.

[94] UNESCO, Institute for statistics. Retrieved 29 October 2009, from http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx BROKEN LINK

VI.5 Concluding remarks

In fact, debates on the relationship between education and economic development and advancement of either individuals or nations not only reached a theoretical consensus, which inspired government of developing countries to develop an appropriate education policy to build human resources for national development, development practitioners and multilateral lending institutions and other ODA agencies also now customarily include education reform as part of their package of financial and technical assistance.

This, however, does not mean that education in general will automatically boost economic development. The analysis of the relationship between education and economic development in Cambodia and Uganda seems to confirm the experience of the successful East Asian countries where the positive economic return to investment in education can be realized only when the educational outcome responds to the need of the local labour market and economy.

Actually, Cambodia and Uganda can exploit their nature of economic openness and competition, extraordinary natural resources, and an energetic youthful population to increase the size of their economy and foster growth through productivity improvement and diversification of their economies. As a result, such actions should help reduce poverty, narrow inequality, and increase GDP (per capita). However, the efforts to develop their countries have been hindered by the lack of an appropriate mix of skilled human resources as their education systems have not been able to provide a more and better-distributed qualified basic-educated population, the skilled workforce in TVET, and the highly skilled workforce in science, engineering, manufacturing, construction, and technology (as discussed in Chapter III, IV and V) that their labour markets and economies need.

In fact, the comparison between Cambodia and Uganda continues to confirm the important role of the appropriate mix of skilled human resources that respond to the labour market and economic needs in explaining the different degree of the countries' development measured in terms of poverty and GDP per capita, rather than the different degree of the quality of economic institutions and business-friendly

environments. For example, the slightly better education provision, in terms of wider and more equitable coverage of basic education and a slightly higher percentage of labour force with technical and vocational qualifications and a higher percentage of student enrollment in science, engineering, technology, manufacturing, and construction in Cambodia than Uganda, is associated with its slightly lower rate of poverty and higher GDP per capita.

CHAPTER VII
CONCLUSION: POLICY IMPLICATION AND LESSONS LEARNED

This comparative study seeks to explain the role the state has played in fostering economic development via deliberate provision of a skilled labour force through the education systems in post-conflict and aid-dependent countries, using Cambodia and Uganda as comparative case studies. This comparative case study approach involves two aspects of analysis. The first aspect is of the relationship between education and economic development, and the second aspect is of the role of the state in the educational policy process. Having presented the detailed empirical data, I now take stock of what this all adds up to, and tease out some policy implications and recommendations as well as spotlight areas for further research. This conclusion is organized into four sections. The first section will review the role of education in economic development in Cambodia and Uganda. The second section will review the role of the state in education policy processes, focusing on policy design and resource allocation and implementation in the education sector. The third section will provide policy lessons learned, and the final section offers recommendations for further research.

VII.1 Education and economic development

One theme cutting across the Ugandan and Cambodian histories of development undertaken by both governments with support from the international donor community, especially since the end of these countries' wars, is the importance of rebuilding their education systems as a means for rehabilitating, reconstructing, and developing their countries, especially in the field of economy. Despite some improvement in the education sector and economic performance, more than two decades after the end of the civil wars in Cambodia and Uganda, the levels of economic development are still low as manifested in high rates of poverty, widening inequality, and low GDP (per capita). Further, there is no significant change in their economic structure, as reflected in the high percentage of the labour force employed in agriculture and its share to the total GDP and higher percentage of unpaid family workers.

The weak links between education and economic development in Cambodia and Uganda do not disprove the important role of education in economic development as claimed by other researches and theories. For example, Benhabib and Spiegel (1994), López et al. (1998), and Easterly (2001) stressed the role of economic institutions (macro-economic stability, a well-defined system of property rights, and openness of the economy), business-friendly environments, such as incentives for investors and good governance, as the fundamental causes of differences in economic performances.

The basic argument developed in this study followed the experience of successful East Asian countries such as Singapore, South Korea, Malaysia, and to a lesser extent Indonesia and Vietnam, where education plays an important role in their economic development. However, this does not mean that educational development in general would contribute to economic development. For its rate of return to be positive and significant, investment in education must respond to the needs of the local labour market and the structure of the economy.

The policies that aim at linking education and training to the needs of the local labour market and economy in Cambodia and Uganda must address the dualistic nature of their economies. On the one hand, there is a rapidly growing urban economy, but still small — emerging low-tech industry and an expanding service sector. On the other hand, there is the underdeveloped rural economy, predominantly agriculture, which needs to be improved and modernized. This situation requires education that places emphasis on basic education and TVET over higher education. Within higher education, improvements in science, engineering, manufacturing, construction and technology would provide more positive returns to the economy compared to the social sciences, business, humanities, and arts. However, the overall performance of the educational provisions in Cambodia and Uganda in terms of the above three aspects is still low in absolute terms and in comparison to the world average and to successful countries in East and Southeast Asia, which partially contribute to their overall low level of economic development.

This is not a unique experience in Cambodia and Uganda. Many developing post-colonial countries have been facing difficulties in producing such a balance of human resources. For example, a recent study by the World Bank (2008) found that the inability to bring high economic growth, better income distribution, and less poverty in the Middle East and North Africa 'are determined … [more] by educational investments than they are by engaging educated workers in jobs that capitalize on their skills' (p. 47).

Cambodian economic performance, however, is slightly better than Uganda, especially since mid-2000s. Cambodia has a lower percentage of the rural population living below the poverty line compared to Uganda. When US$2 per day is used as the poverty line, Cambodia has a substantially lower percentage of the population living below this poverty line than Uganda. Cambodia also has a higher GDP per capita, which was almost two times higher than Uganda by 2010. Although it is still narrowly-based, the Cambodian economy is moving towards becoming more industry-based, as reflected in a higher percentage of the labour force employed in the industrial sector, mainly in garment factories and its higher percentage share in total exports as compared to that of Uganda.

The experience from successful East Asian countries also indicates that a better mixed skilled labour force is key to explaining the different levels of economic development, not only within East Asian countries, but also between successful East Asian countries and other parts of the developing world, rather than the differences in the quality of governance indicators and business-friendly environments. Analysis of the Cambodian and Ugandan cases continues to confirm this important role of a better mixed skilled labour force in order to explain their different economic development trajectory. Since the end of their respective civil wars, Uganda has scored consistently higher in terms of a good governance indicator, a business-friendly environment, and the Ease to Do Business Index, as compared to Cambodia.

The slightly better economic performance in Cambodia than Uganda also disproves the credentialist theory that claims education serves as a ranking and screening in the job recruitment process, but has nothing to do with improving productivity (Bill,

1988; 2003; Weiss, 1995). As discussed in Chapter VI, Cambodian economic productivity is slightly better than Uganda's, which is associated with its slightly better educational provision in three aspects. First, Cambodia is not only able to provide a more and better distributed basic-educated population, but also able to improve the quality of its educational provision than Uganda. For example, student achievement in mathematics and literacy proficiency in Cambodia is higher than in Uganda. Second, Cambodia is able to provide wider coverage of TVET than Uganda, and, finally, Cambodia has higher student enrollments in science, engineering, manufacturing, construction, and technology compared to Uganda, as discussed in Chapters III, IV and V.

VII.2 The role of the state in the education policy processes

The experience of successful East Asian countries, as well as the analysis of the cases of Cambodia and Uganda, as discussed in the theoretical framework in Chapter I and Chapter VI, indicates that the role of these mixed skilled human resources in promoting economic development is indisputable; as Lewin (1993) argues, the problem is no longer to demonstrate the link between education and development, but how to make the education system effectively and efficiently produce this mix of skilled human resources. The economic miracle of East Asian countries, as discussed in the theoretical framework in Chapter I, is partly due to their effective and efficient states in the educational policy processes to produce the appropriately mixed skilled human resources needed by their local labour markets and economies. Being unable to do so leads to a waste of scarce resources and efforts without contributing to any significant economic development.

There are two levels of intervention whereby the state's effectiveness and efficiency can be assessed; one is on the level of policy design and resource allocation, and the second is on the level of policy and resource implementation. Therefore, the task of this comparative case study is to explain the causes that underlie why the states of Cambodia and Uganda are less effective and efficient in providing the appropriately mixed skilled human resource and why Cambodia's state is relatively more effective and efficient than Uganda's.

Policy design and resource allocation: The priority on basic education and TVET over higher education

The empirical analysis of the cases of Cambodia and Uganda reveals that policy priorities and availability of resources appear to have an influence on educational outcomes in both countries as far as pupil enrollment is concerned. In this sense, the better educational outcomes in basic education and TVET in Cambodia than in Uganda after the end of their civil wars have partially resulted from its sustained policy priorities and availability of resources, while the dropping of priorities and the decline of available resources for primary education and the lack of priority given to TVET in Uganda are associated with the decline of and low enrollment in these sub-sectors.

What drives the different policy designs and resource allocation in Cambodia and Uganda? Although the decision over policy design and resource allocation in the education sector in general and the priority given to each sub-sector of education in particular are influenced by several factors — donors', NGOs' and ministries of education's involvement- — the analysis of the cases of Cambodia and Uganda indicates that policy design and resource allocation are much influenced by the political struggle to stay in power, and the different political playing fields to win elections and remain in power would lead to different policy designs and resource allocations.

Immediately after the end of their civil wars, Cambodia and Uganda had similar challenges to increase their public spending on education despite an outcry for education reform. The end of their civil wars did not bring sustained peace to Cambodia and Uganda as the Khmer Rouge and the Lord's Resistance Army, respectively, still carried out military attacks against the Cambodian and Ugandan governments. In Cambodia, the situation was intensified by coalition politics in which the two main political parties (CPP and FUNCINPEC) fought to control the state through every possible means, resulting in military fighting in Phnom Penh, the heart of Cambodia, in July 1997, followed by several political strikes and demonstrations. This situation forced both governments and their ruling elites to allocate a large

percentage of public expenditures to the military at the expense of social services such as education, not only to ensure security but also to maintain political power.

As education was not a priority sector, the resource allocation to the sub-sectors of education was not derived from any technical analysis or planning process. However, it should be noted that historical developments have had impacts to different degrees on both countries. The historical pattern of resource allocation and progress in Uganda is different from that of Cambodia. In Uganda, despite the civil war and the implementation of cost-sharing policies, education progress was not severely interrupted. In fact, the enrollment at all levels increased, albeit slowly during political and social upheaval during the 1970s and 1980s. This situation did not inspire political elites and the donor community to envision radical education reform. Consequently, Uganda follows its historical pattern of resource allocation in which priority is given to secondary and especially to higher education over primary education and TVET.

In contrast, educational progress in Cambodia was not only interrupted but it also regressed because of the Khmer Rouge regime (1975-1979), which completely abolished formal education. Consequently, since 1979, basic education and short courses on TVET have been given priority to help rebuild the country from, what many scholars call, Year Zero. Also, there is the recognition that rehabilitation during the 1980s was far from complete and its educational orientation towards a socialist-communist ideology and planned economy is no longer considered suitable for the context of second-wave democratization and a market economy after the fall of communism. This situation urges political elites, with support from the donor community, who actively play a key role in this transformation process to continue to focus on basic education and TVET to rebuild the nation.

Since the late 1990s, when peace and security were achieved and regular elections were held, the legitimacy of the ruling elites no longer depended on maintenance security alone but on the overall improvement of the country. Consequently, we see an increase of budget allocation to the education sector and the renewal of the role of education in economic development. It is important to note that while Cambodia

consistently maintains the increase of budget allocation to the education sector and continues to focus on basic education and TVET in line with the experience of the successful East Asian countries (albeit with significantly lower quality and results), Uganda has failed to pursue these policies. In Uganda, the priority given to the education sector in general and to primary education in particular as far as the budget allocation is concerned, increased from the late 1990s to the mid-2000s, and then started to decline steadily, with increases towards secondary and higher education. It is important to note that in Uganda, despite the recognition of the important role of TVET in economic development, the share of TVET budget out of the total public spending on the education sector remains low compared to secondary and higher education. What causes such differences?

Again, it has been the local political context that influences such differences, but this time the political context that ruling elites in Cambodia and Uganda had to face in order to maintain themselves in power was rather different. Recently, Uganda has been seen as moving from rational inclusive growth policies to winning popular support in order to maintain power over exclusive and at times ethnic-based growth politics and win elections and control (as manifested by the proliferation of districts and the use of political violence in Kampala, the heart of Uganda, in 2009, by the central government against particular ethnic groups that did not support its policies). This situation negatively affects policy design and resource allocation to the public sector including education, as it no longer depends on real needs and situational analysis, but is influenced by political factors as politicians attempt to use public resources to maintain their power. Consequently, public expenditure for general public administration increased steadily, while the budget for social services like education experienced a steady decline.

In contrast to Uganda, Cambodia recently moved away from pure politics as a means to maintain power to long-term development policies (in which legitimacy is achieved through performance-based evaluations rather than enforced through political violence and intimidation). This situation encourages the withdrawal of political influence over policy design and resource allocation. In cases where politicians are going to influence the policy design and resource allocation, their actions are usually

in line with, rather than against, the local needs and serve to respond to the demands made by local communities represented by NGOs. This is also reflected in the steady increase of budget for social services such as education, while the budget for military experienced a steady decline.

My finding here is similar to that of Meessen et al. (2006) in their study on policy and health finance reform in Uganda and Cambodia. Such commonality shows that policy reform in Ugadna is a top-down approach by government and not initiated by donors and NGOs, although the latter played an important role in financing reform. This is also true in the case of priority given to the sub-sector of education. For example, the emphais on primary education and the shift from primary education to post-primary education in Uganda followed Museveni's promise during the presidential election campaign, rather than based on the situational analysis. Policy reform in Cambodia is usually seen as initiatied by donors and NGOs through their pilot projects with specialized ministries. These projects mostly reflected local needs. These projects also drew from the experience of East Asian countries and were faciliated by the donor community, espeically by ADB in the education sector. However, this initiative can be adopted as national poilcy only when it coincides with political interests as they help to promote the government's legitimacy.

Educational policy and resource implementation

Although policy and resource availability appear to have an influence on enrollment, a more refined educational outcome — measured in terms of completion rates, adult literacy, and distribution of educational provisions among different social groups, as well as in comparison with other countries, are taken into account —, its role was reduced significantly and the outcomes depended on how effectively and efficiently the policies and resources were implemented. The case that policy and resource availability appear to have less impact on educational outcomes is even stronger, and even more so in the case of Uganda. This is evidenced by the inability to improve the quality of education and student enrollment at higher education institutes in the fields of science, engineering, manufacturing, construction, and technology.

In this sense, the different educational outcomes in Cambodia and Uganda are not only limited to policy priorities and availability of resources, but also lie within their different qualities of implementation. This section will be divided into two parts: the first part will examine the quality of the implementation process in Cambodia and Uganda that led to their overall poor educational outcomes, and the second part will compare the quality of implementation in both countries to detect their differences that led to their different educational outcomes.

Poor quality of implementation of policy and resources in Cambodia and Uganda
Although Cambodia is moving away from politics to policy in the sense that policy priorities and resource allocations have been formulated with regard to principles of modern government and institutional arrangement and also to more accurately reflected local needs, Ayres (1999) argues that their implementation has taken place in an environment that is still dominated by a (neo)traditional system of governance and administration based on culturally entrenched notions of hierarchy and power found in patron-client relations, a phenomenon called neopatrimonial politics. Uganda has experienced a similar political trajectory (Mwenda and Tangri 2005).

In a neopatrimonial state, recruitment processes are not based on merit but on tests of loyalty, nepotism, and corruption. This has several negative consequences affecting the implementation processes to achieve desirable design objectives. First, there is an unreasonably higher proportion of non-teaching staff compared to teaching staff due to attempts to build political clients by creating unnecessary offices and administrative units. This situation contributes to the shortage of teaching staff, which affects the quality of education. Moreover, these newly established offices and units usually have unclear and duplicated responsibilities, leading to a waste of both effort and resources. Second, recruitment based on loyalty and bribery hinders the ability of the state to establish a meritocratic bureaucracy.

The bureaucrats, especially at the lower levels, lack capability, as reflected in their low level of formal education, which significantly negatively impacts policy implementation and utilization of resources to improve the education sector. For example, despite the lack of necessary teaching and learning materials, which

negatively affects the quality of education in both countries, a significant proportion of resources is misspent, such as on building huge fences and school gates and the national policy on ICT, where such knowledge is inapplicable in daily economic activity, especially in rural areas and where most of the schools do not even have the electricity to utilize that equipment. In other cases, the lack of capacity among bureaucrats led to piecemeal reforms in the education sector, which were unable to produce significant changes. For example, while the new general curriculum attempts to integrate technical and practical skills to prepare graduates for meaningful participation in the labour market, the implementation of the curriculum was constrained by the old national system of examinations in which these skills were not assessed and, therefore, did not force or encourage schools and teachers to teach these skills.

Finally, but most importantly, the neopatrimonial state is open to and tolerates corruption and misbehavior such as absenteeism among teachers and school directors. In fact, in a neopatrimonial state, the political clients, the state's bureaucrats, are protected through a ceremonial inspection system. In this context, the bureaucrats learn that corruption and misbehavour go unpunished, and they act accordingly. This is compounded by their low pay and requirements to contribute in cash to their patrons for their political projects in order to attract votes, which then forces them to be even more creative in practicing corruption. For instance, despite the fact that access to education is supposed to be free, teachers and schools still continue to demand substantial contributions, usually illegal, from pupils and parents. Such practices have resulted in high rates of non-enrollment and school dropouts because of an inability to pay. Despite the public outcry, both governments are unable to fully punish those involved in such activities.

In another case, while there is a lack of schools and classrooms and teachers, and teachers are demoralized by low salaries, which affect the ability of the education system to expand and improve the quality of educational provision, there is a substantial portion of the budget that is paid to ghost teachers, non-teaching teachers and non-performing school directors, ghost pupils, and even ghost schools. This is because corruption and political interest to attract and retain loyalty provide no

incentive for the government to establish an effective management, supervision, and inspection system; doing so might shake the foundation of the elites' power base and negatively affect mobilization for political support. This situation leaves much leeway in implementation in the hands of frontline service providers.

The lack of effective management, supervision, and an inspection system also led to lower enrollments in TVET and higher education in the fields of science, engineering, manufacturing, construction, and technology. Because of attempts to co-opt their political clients and corruption, states are unable to direct their public higher education institutes to provide only courses that supplement what the private sectors are unable to provide. Instead, the government allows their public higher education institutes to compete with the private sector for private self-sponsored students to enroll in their institutes only in the field of humanities, arts, social sciences, and business, and, therefore, to neglect to invest in other critical areas such as science, engineering, manufacturing, construction, and technology. Both countries have been unable to upgrade university entrance standards so as to channel students to enroll in TVET.

Cambodia's quality of policy and resource implementation is slightly better than Uganda's

During the last decades, decentralization reform was introduced in many parts of the world with an expectation to improve the efficiency of public service provision and bring services closer to people. It also seeks to promote popular participation, to empower local people to make their own decisions, and to enhance accountability. It is important to note that in Uganda basic services such as primary education are delivered within this changing context of governance, from centralization to high decentralization through a council system of local government with its district as the main unit of sub-national government. In Cambodia all social services delivered are still mainly in the hands of the central government delivered through its local administration, even after the recent introduction of a decentralization process.

A study by the World Bank (2004a) indicated that once neopatrimonial politics is embedded in a decentralized mode of service delivery, it has more negative

consequences than when it was embedded in a centralized mode. This is also true in the case of different educational outcomes in Cambodia and Uganda. The move from politics to policy and the centralization of service delivery in Cambodia enable the government to limit the growth of civil servants, thereby reducing the wage share of spending on education. This in turn allows Cambodia to have more resources for capital development such as schools and classrooms, teaching, and learning materials. In contrast, the move back from policy to politics and the decentralization of service delivery in Uganda led to an increase in civil servants and in the wage share of education spending because of the increased number of its administrative units — the district. This in turn decreased the budget for capital development.

That there is more availability of schools and classrooms in Cambodia than Uganda not only results from more availability of resources, but, most importantly, from its lower level of corruption. Although, Cambodia has been ranked consistently as more corrupt than Uganda, the volume of corruption in school and classroom construction is lower compared to Uganda. The centralized mode of governance in Cambodia limits the volume of corruption in the hands of fewer people than the decentralized mode of governance in Uganda that allows the volume of corruption to increase as it involves tender and people at many different levels of administration.

At the same time, this move from politics to a policy and performance base in order to win elections also gives more incentive to the CPP and Hun Sen to accelerate the development of the education sector, such as building more schools and classrooms as there is no political conflict over the legitimacy of the progress. On the contrary, the increase of civil servants in Uganda is meant to provide jobs for political support rather than to provide better services since the performance-based strategy that President Museveni adopted so far has not enhanced his legitimacy because of other factors such as ethnic divisions. This situation also does not provide any incentives for President Museveni and NRM's members to launch a school and classroom construction campaign, as was the case for the CPP and Prime Minister Hun Sen in Cambodia. Consequently, the shortage of schools and classrooms in Uganda remains unresolved, which hinders its ability to expand educational provision.

It is also important to note that the centralized mode of governance in Cambodia also allows Cambodian elites to easily collect corruption money and amass a large amount of funds for this political development project. While in Uganda, corruption is decentralized due to its decentralized mode of governance, a pattern that prevented Museveni from having access to large amounts of slash funds that could be used for such a political development project.

The centralized and planned system of teacher recruitment and placement in Cambodia also allows it to solve teacher accommodation problems as it posts teachers in or near their hometowns, which leads to lower teacher absenteeism and guarantees teacher qualifications, which leads to a better quality of teaching. In contrast, the decentralized and unplanned system of teacher recruitment in Uganda leads to higher teacher absenteeism as government is unable to provide sufficient accommodations for teachers who are recruited from every part of the country and lack qualifications due to corruption in the recruitment process, which significantly negatively impacts the quality of teaching.

The centralized system of textbook distribution in Cambodia also leads to more availability of textbooks at the school level compared to the decentralized system of budget allocation to schools to purchase textbooks of their own. Due to corruption and other factors, textbooks are not purchased by schools, which negatively impacts the quality of learning. In Uganda, because of an attempt by the ruling elites to gain political support from local politicians (a product of decentralization), there is a lack of political will to implement mechanisms for effective accountability.

There are, however, other factors that contribute to the varying quality of implementation in both countries, which leads to different outcomes ranging from donors' and NGOs' involvement, the different natures of institutional arrangements, and teachers' personal motivation and commitment to educate.

Currently in Cambodia and Uganda, because of the scope of their involvement, the international donor community remains essential to the functioning of the Cambodian and Ugandan education systems. However, it is only with appropriate conditionality

that aid can work. For example, the different degrees of corruption in Cambodia and Uganda are also facilitated by different models of donor support in both countries. While donors in Uganda prefer to use general budget support, most donors in Cambodia continue to use this program and project support. In Uganda, the general budget support model led to a withdrawal of donors from directly monitoring the utilization of funds, which creates opportunities for corruption by government officers. In Cambodia, donors have managed their own direct monitoring through their programs and project support by using their own procedures that limit the opportunity for corruption.

In another case, within the same resource envelope, with support from NGOs and donors, Cambodia adopted strategic interventions such as double-shifting and multi-grade teaching to expand the supply-side capacity and provide school breakfasts and scholarship programs to reduce the cost burden (direct and opportunity) on the demand side, and, therefore, to facilitate school-aged children to enroll and remain in school, especially at the basic level. Such direct involvement of donor and NGOs in Uganda is less evident.

Concerning the institutional process, Uganda has better policies and resources to train highly skilled workforces in science-related fields compared to Cambodia. However, its traditional higher education institutions (one university consists of a variety of schools and faculties) led to more duplicated programs in the fields of social science, business, humanities, and arts, which in turn led to lower enrollments in science-related fields compared to the more specialized higher education institutions in Cambodia (for example, the Cambodia Institute of Technology, the Royal University of Agriculture, the University of Medical Science, and the National Polytechnic Institute). This is compounded by the fact that there is a lack of economic incentives as Ugandan white-collar jobs are paid substantially higher, especially within the government sector when compared to Cambodia.

On a personnel level, the rate of absenteeism among Cambodian teachers is lower than that of Uganda, despite the fact that Cambodian teachers' salaries are lower in absolute terms, and the gap between salaries and living costs is larger than Uganda's.

This may be the result of their different motivations and job aspirations. While the majority of Cambodian teachers considered an education profession as their top choice and put the achievement of pupils as their main motivation to teach, the majority of Ugandan teachers entered teaching positions as a last resort and, therefore, pupil achievement is not their main motivation. This is also reflected in the lower turnover rate among Cambodian teachers compared to Ugandan.

VII.3 Policy lessons learned

Educational reform is always defined as an attempt to contribute to building a nation, especially in terms of economic development. However, it is not guaranteed that all investments in education contribute to economic development. The challenge for the educational analyst is to identify what characteristics education can contribute to economic development and to formulate effective measures, including public policy, which can begin to promote such characteristics. Empirical cross-countries analysis, experience from successful countries in East Asia, as well as a comparative analysis of the cases of Cambodia and Uganda indicate that only when education is responsive to the needs of the local labour market and economy can investment provide a positive and substantial return. In developing countries such as Cambodia and Uganda where agriculture still plays a critical role in the economy, the development of industry is still in its infancy, and the rate of illiteracy is high. The strategy of coupling the education system and the labour market and economy is to provide a greater and better distributed and qualified basic-educated population, a more skilled workforce in TVET, and a more highly skilled workforce in science, engineering, manufacturing, construction, and technology.

To achieve a balance and mix of skilled human resources, the state plays an important role. The analysis in Cambodia and Uganda indicates that in countries with clear and long-standing policies and resource commitments, the outcomes are much stronger than in countries whose policies and resource allocations constantly shift. Therefore, drafting the right policy design and allocating resources accordingly are the first priorities, although the actual outcomes still depend on how they are implemented. Ideally, it is only through a meritocratic bureaucracy that policy design and resource allocation can be rightly established within a country's technical and professional

capacities, and desirable design outcomes can be achieved through training and by using professional bureaucrats.

The comparative case study between Cambodia and Uganda, however, reveals that, though to a different degree, the predominance of neopatrimonial politics hinders the ability for a country to establish a meritocratic bureaucracy, which significantly negatively impacts policy design and resource allocation and their implementation. This study also reveals that in a context where wining elections depends on performance-based evaluations of the ruling party, the right policy priorities can be designed and resources can be allocated accordingly, and implementation can be carried out by the ruling elites. For example, Cambodian elites adopted practical policies, such as double-shifting and multi-grade teaching in order reach a wider population. Therefore, assuming that all reforms that are influenced by political interests are working against the needs of local people and the labour markets is misleading.

The ruling elites under neopatrimonial politics, however, are receptive to and tolerate corruption by their political clients, which significantly impacts the quality of implementation; therefore, they are unable to deliver the intended outcomes. In this sense, in the long run, to professionalize the bureaucracy is a necessary step to achieving the intended outcomes. However, this dissertation also finds that when the Cambodian state was weak, as measured in terms of malfunction of the bureaucracy and political interference in technical issues, the donor community played an important role in pressuring the recipient Cambodian government to design and allocate resources to the education sub-sector, which reflected the needs of the local labour market and economy. Further, they can also promote educational development when they carry out their interventions through direct programs and projects independent of the state bureaucracy,[95] compared to the laissez-faire attitudes of the donor community in Uganda.

[95] Although relatively successful in the short term, there is a negative impact in the long run. The negative impact of this type of intervention, as noted by many critics, is that it does not contribute to building the capacity of the state's institutions or help to reform the institutional capacity across the board. First, if the project is implemented within the Ministry, donors pay supplemented salaries for

VII.4 Further research

There are three areas for further research that emerge from this comparative case study. First, as indicated in this study, the lack of a meritocratic bureaucracy hinders the government's ability to design right policy priorities, allocate resources accordingly, and implement them correctly. Therefore, an intensive case study should be carried out regarding the circumstances in which a meritocratic bureaucracy can be established. Second, under a similar neopatrimonial state, Cambodian elites are able to align their policies with the interests of poor people, compared to Ugandan elites. Therefore, such a case study should focus on what circumstances political elites can align with, rather than against, the interests of poor people. Finally, as briefly noted in the study, individual schools and teachers respond to given policies and resources in different ways, which leads to different outcomes, both within the country and across the countries. Therefore, it is important to conduct an intensive case study of successful schools and teachers to identify their characteristics in order to provide the lessons learned by each country, as well as by schools and teachers and to help policy makers adopt policies that promote such characteristics.

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government officials who work on their projects, which distorts the whole public administration reform. Second, if it is implemented outside the Ministry, it attracts qualified state bureaucrats to work for their projects because of higher pay. Further, there is also the likelihood of fragmentation and duplication of projects if donors are not well coordinated. Therefore, the donor community should review their previous programs and project support to make them consistent with the long term professionalization of the recipient countries' bureaucrats.

Summary

This study attempts to compare education and the economic development trajectory of two post-conflict countries, Cambodia and Uganda — from 1993 for Cambodia and 1986 for Uganda. Such an examination involves two aspects of analysis: the relation between education and economic development, and the role of the state in educational development.

The examination of the relationship between education and economic development will not employ any statistical method, but consists of examining the change in educational progress and economic development in both countries. The examination of this relationship is based on the Endogenous Growth Theory which stipulates that economic growth in the long run is driven by the accumulation of knowledge and that human capital has an increasing rate of return while physical capital has a diminishing rate of return. In the context of post-conflict countries such as Cambodia and Uganda where the human capital stock has declined, investment in education is even more important for economic development.

Educational investment in general, however, will not automatically boost economic development. To reap the greatest potential from an investment in education, it is important to ensure that educational provision corresponds to a country's economic and labour market, and level of technological development. If the labour market and economy are unable to absorb graduates, they will remain underutilized or, even worse, unemployed; or if the education system is not able to produce the appropriate mix of qualified human resources for the labour market, the economy will continue to perform below its potential.

Although Cambodian and Ugandan economic development since the end of their respective civil wars improved steadily, their performance remains far from satisfactory as manifested by a high rate of poverty, inequality and narrow economic base. These problems, this dissertation argues, are attributed partly to both countries' inability to link their education and training policies to the needs of the local labour market and economy. Their current labour markets and economies, on the one hand, is characterized by a rapidly growing urban economy, but they are still small with their

emerging low-tech industry and expanding service sector and on the other hand, by their underdeveloped rural and largely agrarian economies. These characteristics require education that places emphasis on basic education and TVET (technical and vocational education and training) over higher education. Within higher education, improvements in science related fields would provide more positive returns to the economy compared to the social sciences, business, humanities, and arts. However, this dissertation further finds that the overall performance of the educational provisions in Cambodia and Uganda remain poor in terms of the above three aspects. The primary completion rate and quality of education measured in term of pupils' proficiency in mathematics and literacy are very low in both countries, especially in poor rural areas. The education system at post-basic level could not meet the need for skilled labour forces in TVET and science related fields.

Arguably, Cambodian economic performance in terms of poverty rate and GDP per capita is slightly better than that of Uganda, especially since the mid-2000s. This dissertation emphasizes that a relative better mix of qualified skilled labour force is a key to explaining the different levels of economic development between Cambodia and Uganda, rather than the commonly known factors such as the role of economic institutions, business friendly environment and good governance.

The second issue of this dissertation's analysis examines the role of the states in reforming their education systems since the end of the civil wars. The finding of this dissertation indicates that in general the states of Cambodia and Uganda are less effective and efficient in designing educational policy, allocating resources accordingly, and in implementing educational policy and resources to provide the appropriate mix of qualified skilled human resources. However, it notes that Cambodia's state is relatively more effective and efficient than Uganda's.

In Cambodia and Uganda, policy design and resource allocation are much influenced by the political struggle to stay in power, and the different political playing fields and their connections to electoral politics will lead to different policy design and resource allocations.

Immediately after the end of their civil wars, Cambodia and Uganda had similar challenges to increase their public spending on education, despite an outcry for educational reform. The end of the civil war did not bring sustained peace as guerrilla groups (Khmer Rouge in Cambodia and Lord's Resistance Army in Uganda) continued to fight against both governments. In Cambodia, the situation was intensified by a competition between the two main political rivals the CPP (Cambodian People's Party) and FUNCINPEC over state control which resulted in political and social instability. This situation forced both governments and their ruling elites to allocate a large percentage of public expenditures to the military at the expense of social services such as education, not only to ensure security but also to maintain political power.

Since the late 1990s, when peace and security were achieved and regular elections were held, the legitimacy of the ruling elites no longer depended on maintenance of security alone but on the overall improvement of the country which led to an increase of budget allocation to the education sector and the renewal of the role of education in economic development.

In Uganda, in terms of budget allocation, the priority given to the education sector in general and to primary education in particular increased from the late 1990s to the mid-2000s, and then started to decline steadily, with increases towards secondary and higher education. It is important to note that in Uganda, despite the recognition of the important role of TVET in economic development, the share of the TVET budget out of the total public spending on the education sector remains low compared to secondary and higher education. It is argued that this shift in focus derives from president Museveni's strategic political calculation.

To maintain power, president Museveni has been seen as moving from rational inclusive growth policies directed at winning popular support in order to maintain power to exclusive and at times ethnic-based growth politics directed at winning elections and keeping control. This situation negatively affects policy design and resource allocation to the public sector including education, as it no longer depends on real needs and situational analysis, but is influenced by political factors as politicians

attempt to use public resources to maintain their power. Consequently, public expenditure for general public administration increased steadily, while the budget for social services like education experienced a steady decline.

In contrast to Uganda, the result of the past three general elections in Cambodia indicates that the electoral support to CPP has increased over time. This legitimacy, this dissertation argues, was achieved through performance-based evaluations rather than enforced through political violence and intimidation. This is reflected in the fact that Cambodia recently moved away from pure politics as a means to maintain power to potential long-term development policies. This situation encourages the withdrawal of political influence over policy design and resource allocation. In cases where politicians are going to influence the policy design and resource allocation, their actions are usually in line with, rather than against, the local needs and serve to respond to the demands made by local communities represented by NGOs. The outcome has been the steady increase of budget for social services such as education, while the budget for military expenses experienced a steady decline.

The implementation of Cambodia's shift from politics to policy, i.e. the emergence of policy priorities and resource allocations in response to local needs, however, is constrained by the persistence of a (neo)traditional system of governance and administration based on culturally entrenched notions of hierarchy and power found in patron-client relations. Uganda has experienced a similar political trajectory. But as this dissertation demonstrates, the differences in political realities in the two countries produce differences outcomes.

Under this patron-client politics, recruitment processes are not based on merit but on tests of loyalty, nepotism, and corruption, conditions that lead to rising bureaucratic incompetence, misuse of resources, corruption and misbehaviour among school teachers and administrators as well as a piece-meal reform process. These challenges form barriers to implement a policy and achieve a desirable outcome.

This study stresses that once patron-client politics is embedded in a decentralized mode of service delivery, it has more negative consequences than when it is

embedded in a centralized mode. This is another reason that contributes to the different educational outcomes in Cambodia and Uganda. In Uganda basic services such as primary education are delivered within this changing context of governance, from centralization to high decentralization through a council system of local government with its district as the main unit of sub-national government. In Cambodia all social services delivered are still mainly in the hands of the central government delivered through its local administration, even after the recent introduction of a decentralization process.

The move from politics to policy and the centralization of service delivery in Cambodia enabled the government to limit the growth of civil servants, thereby reducing the wage share of the spending on education. This in turn allows Cambodia to have more resources for capital development such as schools and classrooms, and teaching and learning materials. In contrast, the move back from policy to politics and the decentralization of service delivery in Uganda led to an increase in civil servants and in the wage share of the spending on education because of the increased number of its administrative units — the district. This in turn decreased the budget for capital development.

The centralized mode of governance in Cambodia limits the volume of corruption in the hands of fewer people than the decentralized mode of governance in Uganda. Here the volume of corruption can increase as it involves tenders and people at many different levels of administration who affect school construction and textbook purchase.

At the same time, this move from politics to policy and performance in order to win elections in Cambodia also gives a greater incentive to ruling elites to accelerate the development of the education sector, such as the additional construction of schools. On the contrary, in Uganda, the performance-based strategy that president Museveni adopted so far has not enhanced his legitimacy because of other factors such as ethnic divisions and inter and intra party challenge to his leadership. This situation does not provide any incentives for president Museveni and the NRM members to launch a school construction campaign, as was the case for the CPP and Prime Minister Hun

Sen in Cambodia. Consequently, the shortage of schools and classrooms in Uganda remains unresolved, which hinders its ability to expand educational provision.

The centralized mode of governance in Cambodia also allows Cambodian elites to easily collect corruption money and channel part of it to development projects. While in Uganda, corruption is decentralized due to its decentralized mode of governance, a pattern that prevented Museveni from having access to large amounts of slash funds that could be used for such political development projects.

The centralized and planned system of teacher recruitment and placement in Cambodia also allows it to solve teacher accommodation problems as it posts teachers in or near their hometowns. This leads to lower teacher absenteeism and guarantees teacher qualifications, which causes a better quality of teaching. In contrast, the decentralized and unplanned system of teacher recruitment in Uganda leads to a higher teacher absenteeism. The government is unable to provide sufficient accommodations for teachers who are recruited from every part of the country and lack qualifications due to corruption in the recruitment process, which significantly negatively impacts the quality of teaching.

Samenvatting

Deze studie probeert onderwijs en economische ontwikkeling te vergelijken in twee landen die een periode van oorlog hebben meegemaakt, Cambodja vanaf 1993 en Oeganda vanaf 1986. Het onderzoek houdt een analyse in van twee aspecten: de relatie tussen onderwijs en economische ontwikkeling en de rol van de staat in de ontwikkeling van het onderwijs.

De relatie tussen onderwijs en economische ontwikkeling zal niet volgens een statistische methode onderzocht worden maar zal bestaan uit een onderzoek naar de verandering in de vooruitgang op onderwijsgebied en de economische ontwikkeling in beide landen. Het onderzoek naar deze relatie is gebaseerd op de Endogenous Growth theorie, die ervan uitgaat dat economische groei op de lange termijn wordt aangedreven door de accumulatie van kennis en dat menselijk kapitaal een toenemend rendement heeft terwijl fysiek kapitaal een afnemend rendement heeft. In landen die een na-oorlogse periode doormaken zoals Cambodja en Oeganda, waar de beschikbaarheid van menselijk kapitaal geringer is geworden, is investering in het onderwijs zelfs nog belangrijker voor economische ontwikkeling.

In het algemeen zullen investeringen op onderwijsgebied niet automatisch economische ontwikkeling stimuleren. Om de meeste mogelijkheden uit een investering in onderwijs te verkrijgen is het belangrijk dat het onderwijsaanbod overeenkomt met de omstandigheden en de structuur van de economie en de arbeidsmarkt van een land, alsook met het niveau van technologische ontwikkeling. Als de arbeidsmarkt en de economie niet in staat zijn afgestudeerden op te nemen, dan zullen ze onderbenut of, nog erger, werkloos blijven; of indien het onderwijssysteem niet in staat is gekwalificeerde mensen voor de arbeidsmarkt in de juiste onderlinge samenstelling af te leveren, dan zal de economie beneden haar mogelijkheden blijven presteren.

Hoewel de economische ontwikkeling van Cambodja en Oeganda zich langzaam aan heeft verbeterd sedert het einde van de burgeroorlogen, is hun prestatie verre van bevredigend zoals blijkt uit een hoge armoedegraad, ongelijkheid en een smalle

economische basis. Deze problemen kunnen volgens dit proefschrift deels worden toegeschreven aan het onvermogen van beide landen hun onderwijs en training af te stemmen op de behoeften van de lokale abeidsmarkt en economie. Hun huidige arbeidsmarkten en economiëen worden gekenmerkt door een snel groeiende stedelijke economie met een opkomende eenvoudige industrie en zich uitbreidende dienstensector. Hun onderontwikkelde en grotendeels agrarische economiëen vereisen onderwijs dat de nadruk legt op basisonderwijs en TVET (Technical and Vocational Education and Training) boven hoger onderwijs. Binnen het hoger onderwijs zullen verbeteringen op het gebied van aan de exacte wetenschap verwante gebieden een meer positieve bijdrage aan de economie leveren dan sociale wetenschappen, handelswetenschappen, geesteswetenschappen en kunsten. In dit proefschrift wordt echter gesteld dat in het algemeen de prestatie van de voorzieningen op onderwijsgebied in Cambodja en Oeganda ten aanzien van de bovengenoemde drie aspecten mager zijn. De mate waarin het basisonderwijs wordt afgemaakt en de onderwijskwaliteit gemeten in termen van de vaardigheid van leerlingen in wiskunde en lezen en schrijven, zijn zeer laag in beide landen, met name in de arme plattelandsgebieden. Het onderwijssysteem op het niveau boven het basisonderwijs kon tot mu toe niet voldoen aan de behoefte aan geschoolde arbeid op het terrein van TVET en aan de exacte wetenschap verwante gebieden.

De armoedegraad en het BNP per hoofd van de bevolking zijn voor Cambodja wellicht gunstiger dan voor Oeganda, vooral sedert het midden van de jaren 2000. Dit proefschrift benadrukt dat de betere onderlinge samenstelling van geschoolde arbeid de sleutel is tot de verklaring van het verschil in economische ontwikkeling tussen Cambodja en Oeganda en niet zozeer de algemeen bekende factoren als de rol van economische instellingen, good governance en een omgeving die het zakenleven gunstig gezind is.

Het tweede thema van de analyse in dit proefschrift onderzoekt de rol van de staat in de hervorming van het onderwijssysteem sedert het einde van de burgeroorlog. In het proefschrift wordt geconstateerd dat in het algemeen de staten van Cambodja en Oeganda weinig effectief en efficiënt zijn geweest in het formuleren van een onderwijspolitiek en het dienovereenkomstig toewijzen van middelen, evenmin als in

het uitvoeren van een onderwijspolitiek en het leveren van middelen om de juiste onderlinge samenstelling van geschoolde arbeidskrachten te bereiken. Er wordt echter opgemerkt dat de staat van Cambodja relatief meer effectief en efficiënt is geweest dan die van Oeganda.

In Cambodja en Oeganda worden zowel de formulering van beleid als de toewijzing van middelen in hoge mate beïnvloed door het politieke gevecht om aan de macht te blijven. De verschillen tussen politieke groeperingen en hun contacten met het verkiezingsgebeuren kunnen leiden tot verschillen in de formulering van beleid en de toewijzing van middelen.

Onmiddellijk na het einde van de burgeroorlogen stonden Cambodja en Oeganda in gelijke mate voor de uitdaging hun publieke uitgaven aan onderwijs te verhogen, ondanks een roep om hervorming van het onderwijs. Het einde van de burgeroorlog bracht nog geen aanhoudende vrede omdat guerilla groepen (Khmer Rouge in Cambodja en Lord's Resistance Army in Oeganda) zich tegen beide regeringen bleven verzetten. In Cambodja werd de situatie verergerd door de wedijver tussen de twee belangrijkste politieke rivalen, de CPP (Cambodian People's Party) en FUNCINPEC, over uitoefening van de staatsmacht, hetgeen leidde tot politieke en sociale instabiliteit. Deze situatie dwong zowel de regeringen als hun heersende elites een groot percentage van de publieke uitgaven te besteden aan de krijgsmacht ten koste van sociale diensten als onderwijs, niet alleen om de veiligheid te garanderen maar ook om de politieke macht te behouden.

Sedert het eind van de jaren 90, toen vrede en veiligheid werden bereikt en normale verkiezingen werden gehouden, was de legitimiteit van de heersende elites niet langer afhankelijk van het handhaven van veiligheid maar van de algehele verbetering van het land. Dit heeft tot een toename geleid van het budgetaandeel voor onderwijs en tot de vernieuwing van de rol van onderwijs in de economische ontwikkeling.

In Oeganda is er binnen de begroting vanaf het eind van de jaren 90 tot het midden van de jaren 2000 een hogere prioriteit gegeven aan de onderwijssector in het algemeen en aan het basisonderwijs in het bijzonder, maar daarna begon die prioriteit

langzaam aan af te nemen, met een toename in de richting van voortgezet en hoger onderwijs. Het is belangrijk vast te stellen dat in Oeganda, ondanks de erkenning van de belangrijke rol van TVET in economische ontwikkeling, het aandeel van het TVET budget binnen de totale publieke uitgaven aan de de onderwijssector laag blijft in vergelijking met het voortgezet en hoger onderwijs. Er wordt gesteld dat deze wisseling van aandacht afkomstig is van de strategische politieke berekeningen van president Museveni.

In zijn streven de macht te behouden heeft president Museveni zich bewogen van een rationeel inclusief beleid dat gericht is op groei en het winnen van de steun van de bevolking voor het behoud van zijn macht in de richting van een soms op etniciteit gebaseerd politiek machtsspel gericht op het winnen van verkiezingen en het behouden van controle. Deze situatie heeft een negatieve invloed op de formulering van beleid en de toewijzing van hulpmiddelen aan de publieke sector, waaronder onderwijs, omdat deze niet langer gebaseerd zijn op de werkelijke behoeften en een analyse van de situatie maar beïnvloed worden door politieke factoren zoals de poging van politici publieke middelen te gebruiken om hun eigen macht te handhaven. Daarom stegen de publieke uitgaven voor algemeen publiek bestuur voortdurend, terwijl het budget voor sociale diensten als onderwijs geleidelijk verminderde.
In tegenstelling tot Oeganda geeft het resultaat van de laatste drie algemene verkiezingen in Cambodja aan dat de steun voor de CPP onder de kiezers geleidelijk aan is toegenomen. Deze legitimiteit, zo stelt dit proefschrift, werd meer bereikt door waardering van verrichte prestaties dan dat ze werd afgedwongen via politiek geweld en intimidatie. Dit wordt weerspiegeld door het feit dat Cambodja onlangs de stap heeft gezet van pure machtspolitiek naar een mogelijk lange-termijn ontwikkelingsbeleid. Deze situatie bevordert een vermindering van politieke invloed over de formulering van beleid en toewijzing van middelen. Wanneer politici invloed gaan uitoefenen op de formulering van politiek en toewijzing van middelen, lopen hun handelingen gewoonlijk parallel aan lokale belangen – in plaats van ermee in strijd te zijn – en dienen ze overeen te komen met de wensen van lokale gemeenschappen vertegenwoordigd door NGO’s. Het resultaat is een gestage toename geweest van het budget voor sociale diensten zoals onderwijs, terwijl het budget voor de strijdkrachten een voortdurende vermindering onderging.

De wijze waarop Cambodja de stap van politiek machtsspel naar politiek beleid heeft gezet, dat wil zeggen de opkomst van politieke prioriteiten en toewijzing van middelen in overeenstemming met lokale behoeften, wordt echter beperkt door het voortbestaan van een (neo)traditioneel systeem van regeren en besturen dat gebaseerd is op cultureel diepgewortelde noties van hiërarchie en macht die kenmerkend zijn voor patroon-cliënt relaties. Oeganda heeft een soortgelijke politieke koers afgelegd. Maar zoals dit proefschrift laat zien, de verschillen in de politieke werkelijkheid van beide landen hebben tot een verschillend resultaat geleid.

Binnen dit patroon-cliënt systeem zijn benoemingsprocessen niet gebaseerd op verdienste maar op bewijzen van loyaliteit, nepotisme en corruptie, omstandigheden die zowel tot de toename van bureaucratische incompetentie, verkwisting van hulpbronnen, corruptie en wangedrag onder onderwijzers en bestuurders alsook tot een traag hervormingsproces kunnen leiden. Deze uitdagingen vormen hindernissen bij de uitvoering van een beleid en het bereiken van het gewenste resultaat.

Deze studie benadrukt dat wanneer het patroon-cliënt systeem eenmaal is ingebed in een gedecentraliseerde wijze van dienstverlening, ze meer negatieve gevolgen heeft dan wanneer ze in een gecentraliseerde wijze is ingebed. Dit is een andere reden die bijdraagt aan het verschil in onderwijsresultaat in Cambodja en Oeganda. In Oeganda worden essentiële diensten als basisonderwijs binnen deze veranderende bestuurlijke context verschaft, van centralisatie naar hoge decentralisatie via een radensysteem van plaatselijk bestuur met het district als de voornaamste eenheid van sub-nationaal bestuur. In Cambodja zijn alle sociale diensten nog in handen van de centrale regering en worden aangeboden via het lokale bestuur, zelfs na de recente invoering van een decentralisatieproces.

De verschuiving van politiek machtsspel naar politiek beleid en de centralisatie van het dienstenaanbod in Cambodja heeft de regering in staat gesteld de groei van het aantal ambtenaren te beperken en zo het loonaandeel in de uitgaven aan onderwijs terug te brengen. Dit stelt Cambodja weer in staat over meer middelen te beschikken voor de ontwikkeling van kapitaal zoals scholen en klaslokalen en les- en leermateriaal. De beweging terug in Oeganda daarentegen, van politiek beleid naar

politiek machtsspel en decentralisatie van dienstenaanbod, heeft tot een toename van het aantal ambtenaren en van het loonaandeel in de uitgaven aan onderwijs geleid vanwege de toename van het aantal bestuurlijke eenheden – de districten. Dit heeft weer het budget voor kapitaalontwikkeling doen dalen.

De gecentraliseerde wijze van bestuur in Cambodja beperkt de omvang van corruptie in handen van minder mensen dan de gedecentraliseerde wijze van bestuur in Oeganda. Hier kan de omvang van corruptie toenemen omdat er offertes bij betrokken zijn en allerlei personen op verschillende niveaus van bestuur die te maken hebben met de bouw van scholen en de aanschaf van leerboeken.

Tegelijkertijd vormt in Cambodja deze verschuiving van politiek machtsspel naar politiek beleid en prestatie om verkiezingen te winnen een grotere aansporing voor de heersende elites om de ontwikkeling van de onderwijssector te versterken, zoals door de aanleg van extra scholen. In Oeganda daarentegen heeft de op prestatie gebaseerde strategie die president Museveni heeft aangenomen, tot nu toe niet zijn legitimiteit vergroot vanwege andere redenen zoals etnische verdeeldheid en het betwisten van zijn leiderschap binnen en buiten zijn partij. Deze situatie verschaft weinig prikkels voor president Museveni en de NRM leden een campagne voor het bouwen van scholen te organiseren, zoals het geval was met de CPP en premier Hun Sen in Cambodja. Het tekort aan scholen en klaslokalen in Oeganda blijft dan ook onopgelost, hetgeen een belemmering is voor de uitbreiding van het onderwijsaanbod. De gecentraliseerde wijze van bestuur in Cambodja stelt de Cambodjaanse elites ook in staat gemakkelijk corruptiegeld te verzamelen en een deel er van naar ontwikkelingsprojecten te sluizen. In Oeganda is corruptie daarentegen gedecentraliseerd vanwege haar gedecentraliseerde wijze van bestuur, een patroon dat Museveni heeft verhinderd toegang te krijgen tot grote sommen slash funds die voor zulke politieke ontwikkelingsprojecten gebruikt zouden kunnen worden.

Het gedecentraliseerde en geplande systeem van het werven en benoemen van onderwijzers in Cambodja maakt het ook mogelijk accommodatieproblemen van onderwijzers op te vangen omdat onderwijzers in of nabij hun woonplaats worden geplaatst. Dit leidt tot een lagere afwezigheid van onderwijzers en is een garantie voor

de kwalifikatie van onderwijzers, hetgeen weer voor een betere kwaliteit van lesgeven zorgt. Het gedecentraliseerde en ongeplande systeem van werving van onderwijzers in Oeganda leidt tot een hogere afwezigheid van onderwijzers. De regering is niet in staat voldoende accommodatie voor de onderwijzers te vinden die uit elk deel van het land geworven worden en niet de juiste kwalifikaties hebben vanwege corruptie in het wervingsproces, wat een beduidend negatieve invloed heeft op de kwaliteit van het lesgeven.

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Internet forum and e-mail group

http://asiapacific.anu.edu.au/newmandala/

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Appendix 1

List of interviewees, group discussions and field observations

There are several methods by which interviews were conducted, such as formal semi-structured interviews, group discussions, participation, observation, and personal conversations. For personal conversations, the interviewees did not wish to be identified in this study, most of whom are working closely in education sectors and therefore are referred to here in alphabetical code. The interviews, personal conversations, field observations, and anecdotal evidence cited in this study are all referred to in this section. The list is not a comprehensive catalogue as many others also provided information, and whose opinions were helpful in constructing the argument in this study.

I. Formal interview

Name	Position	Institution and location	Date
1. BUN Phearin	President	National Polytechnic Institute of Cambodia, Phnom Penh	3 September 2008
2. SIN Meng Srun	Vice-president	Pannasastra University of Cambodia, Phnom Penh (private university)	13 October 2008
3. NORGN Ratana	Associate consultant	BDLINK (Cambodia) Co., Ltd., Phnom Penh	4 August 2008
4. SEU Sopheak	Recruitment Consultant	HR Inc. Cambodia, Co., Ltd., Phnom Penh	4 August 2008
5. CHEA Meath	Recruitment officer	A Plus Consultancy, Phnom Penh	5 August 2008
6. Luise AHRENS	Coordinator and advisor	EDUCAM (a group people who are interested in education in Cambodia) and Royal University of Phnom Penh, Phnom Penh (public university)	7 August 2008
7. LENG	Education/	NGO, Education Partnership	20 August 2008

Theavy	Capacity Building Officer		
8. CHAN Sophal	Senior Research Manager	Cambodia Development Resource Institute, Phnom Penh	19 August 2008
9. PHANN Sopheara	Training and Quality Assurance Manager	Raffles Hotel Le Royal, Phnom Penh	4 September 2008
10. BENG Sameth	Human Development Operations Officer	World Bank, Cambodia Country Office	18 August 2008
11. John MOREFIELD	Leadership Development Advisor	Leadership Development Program, Cambodia Education Sector Support Project, Ministry of Education, Youth, and Sport, and World Bank	6 September 2008
12. WIN Yean	Administration officer	Sametex Garment (Cambodia) Co, Ltd, Phnom Penh	5 September 2008
13. CHHENG Soriya	Teacher	Prekchhrey Primary School, Saan district, Kandal province	8 September 2008
14. Lynn DUDLEY	Advisor	Cambodia Education Sector Support Project, Ministry of Education, Youth, and Sport, and World Bank	10 September 2008
15. MANG Sokhom	Vice-director	Life High School, Sihanouk Ville (private school)	8 October 2008
16. TIM Phearith	Vice-director,	Life Lower Secondary School, Sihanouk Ville	8 October 2008

		(private school)	
17. Dr. CHO Ja Kim	President	Life University, Sihanouk Ville (private university).	8 October 2008
18. UNG Kimsan	Deputy director	Pedagogical Research Department, Ministry of Education, Youth, and Sport	15 October 2008
19. SIN Putheasath	Vice-Rector	Svay Rieng University, Svay Rieng province (public university)	17 October 2008
20. Va Sarun	Principal	Ba Phnom High School, Ba Phnom district, Prey Veng province	18 October 2008
21. YI Saroeung	Vice-principal	Ba Phnom High School, Ba Phnom district, Prey Veng province	18 October 2008
22. HOL Ly	Principal	Kandolchhroum Primary School, Kanchreach district, Kampong Cham province	2 December 2008
23. LEANG Sim	Deputy director	Kandolchhroum Primary School, Kanchreach district, Kampong Cham province	2 December 2008
24. SOK Oun	Deputy director	Kandolchhroum Primary School, Kanchreach district, Kampong Cham province	2 December 2008
25. TOUCH Chan Dara	Student	Vannda Institute	10 December 2008
26. RATH Sokunthea	Former student	Roussey Keo High School	20 December 2008
26. SY Lakhana	Student	Build Bright University	21 December 2008
27. SENG Theara	Student	Cambodian Mekong University	21 December 2008
28. CHENG	Student	Center for Development of	21 December 2008

Vicheka		Indian Entrepreneur	
29. LIM Kim Orn	former deputy chief office and teacher	Pursat Provincial Department of Education, Youth and Sport. and Kandeang Upper Secondary School	2 February 2009
30. KEAT Socheun	Teacher-student and former teacher	National Institute of Education, and Anuvat Primary School	11 March 2009
31. Goerge Kalibbala	Education advisor	Royal Netherlands Embassy, Uganda	14 April 2009
32. Juliet Wajega Sasagah	Programme coordinator	Uganda National Teachers' Union	21 April 2009
33.Kyarikunda Loise	Deputy head teacher	Mbarara Municipal School	30 April 2009
34. Godfrey Arnold Dhatemwa	Commissioner	Education Planning Department, MOES	14 May 2009
35. Sukhdeep Brar	Education specialist	World Bank, Uganda Country office	14 May 2009
36. Steven Galiwango	Head teacher	Mutesa Primary School, Wakiso district	22 May 2009
37. Godfrey Onyait	Director of academic study	Nkumbe Primary School, Wakiso district	29 May 2009
37. Shafik Agaba	Director of academic study	Najja High School, Kampala	1 June 2009
38. Nlobi Jonas	Deputy Head-teacher	Makerere College School, Kampala	8 June 2009
39. Hygiene Beheisa	Head-teacher	St. Paul High School, Ntygamo	11 June 2009
40. Omedo Patrick	Director of academic Study	St. Mary's College, Wakiso district	16 June 2009
41. Katankula	School	Jinja Town council	28 July 2009

Henry Stephen	Inspector		
42. Were Abraham	Officer	District Education Office, Jinja district	28 July 2009
43. Kamwana Jonalhan	Principle Education Officer	Municipal Council, Jinja district	30 July 2009
44. Dinah Hope Tuhumwire Nyago	Head-teacher	Jinja SS school	30 July 2009
45. Were Abraham	District Education Officer	Jinja district	29-31 July 2009
46. Alice Kafuko	Inspector	Jinja district	31 July 2009
47. Irene Mawanda	Service commissioner/ former head teacher	Jinja district	2 August 2009
48. Sarah Namuli-Tamale	Assistant commissioner	Technical, Vocational and Business Education and Training, Ministry of Education and Sport.	14 August 2009
49. Watsak Wilbertfuce	Academic registrar	Uganda Technical Colleges, Mbale district	24 August 2009
50. John Ntamuhiira Twesigye	Principal	Uganda Technical Colleges, Mbale district	24 August 2009
51. H.E. Heng Sour	Director general	Ministry of Labour and Vocational Training	12 January 2010

II. Personal conversation

Name	Position	Institution and location	Date
A	Student	Baktouk High School, Phnom Penh	12 January 2009

B	Teacher trainer	National Institute of Education, Phnom Penh	Several discussions
C	Director	Youth Resource Development Program, Phnom Penh	Several discussions
D	Director	Gender and Development for Cambodia, Phnom Penh	Several discussions
E	Training manager	Gender and Development for Cambodia, Phnom Penh	Several discussions
F	Chairperson	Department of Philosophy, Royal University of Phnom Penh, Phnom Penh	Several discussions
G	Teacher	Baktouk High School, Phnom Penh	17 September 2008
H	Former teacher and deputy-school principal	Toul Tompoung High School, and Bengkengkang High School, Phnom Penh	17 September 2008
I	Former administrator and Principal of Khlang	Baphnom High School, and lower secondary school, Ba Phnom district, Prey Veng province	Several discussions
J	Researcher and lecturer	Royal Academy of Cambodia, Khemarak University, private university, Phnom Penh	Several discussions
K	Teacher trainer	Regional Teacher Training Center, Phnom Penh	Several discussions
L	Education officer	VSO, Cambodia	Several discussions
M	Professor	Royal University of Phnom Penh, Phnom Penh	Several discussions
N	Dean of foundation year	University of Cambodia, Phnom Penh	Several discussions
O	Lecturer	Pannasastra University of Cambodia, Phnom Penh	Several discussions

P	Dean	Faculty of Social Sciences and Humanities, Royal University of Phnom Penh, Phnom Penh	Several discussions
Q	Teacher	Mitapheap High School, Sihanouk Ville, Sihanouk Ville	6-7 October 2008
R	Vice-director	Department of Standards and Quality Accreditation, Accreditation Committee of Cambodia, Sihanouk Ville	6-8 October 2008
S	Technical staff	Accreditation Committee of Cambodia, Sihanouk Ville	6-8 October 2008
T	Vice-president	Human Resource University, Sihanouk Ville	6-8 October 2008
U	Chief officer	Office of the Inspection, Department of Higher Education, Ministry of Education, Youth, and Sport, Phnom Penh	6-8 October 2008
V	Rector	Svay Rieng University, public university, Svay Rieng	16-17 October 2008
W	Chief officer	District Office of Education, Youth, and Sport, Ba Phnom District, Prey Veng Province	18 October 2008
X	Assessor	Accreditation Committee of Cambodia, Phnom Penh	Several discussions
Y	Education management advisor	Kampuchea Action for Primary Education, Kampong Cham province	1-2 December 2008
Z	Chief of Party	School for Life Project, World Education and Kampuchea Action for Primary Education, Kampong Cham province	1-2 December 2008
AA	Former chief of officer and	Soung District of Education, Youth and Sport and Kampuchea Action for	3 December 2008

	Technical program officer	Primary Education, Soung district, Kampong Cham province	
AB	Teacher, and teacher-student	Taprok lower secondary school, and Kampong Cham Regional Center for Pedagogy, Chamkarleu district, Kampong Cham province	3-4 December 2008
AC	Former school director	Kokor primary school, Kampong Siem district, Kampong Cham province	2 December 2008
AD	Chief of workshop	Kokor primary school, Kampong Siem district, Kampong Cham province	2 December 2008
AE	Secretary	Kampong Krabey primary school, Kampong Siem district, Kampong Cham province	2 December 2008
AF	Teacher	Kampong Krabey Primary School, Kampong Siem district, Kampong Cham province	2 December 2008
AG	Student	Baktouk Primary School	9 December 2008
AH	Chief office, secondary school	Pursat Provincial Department of Education, Youth, and Sport	2 February 2009
AI	Chief office, primary school	Pursat Provincial Department of Education, Youth, and Sport	2-3 February 2009
AJ	Teacher	Lower secondary school, Kampong Chhnang	15-18 February 2009
AK	Student	Makerere University	19 Aril 19, 2009
AL	Chairperson	Governing Board, Mutesa primary school, Wakiso district	25 April 2009
AM	Treasurer	Parent Teacher Association, Mbarara Municipal School	30 April 2009
AN	Inspector	Ntungamo Education District Office	1 May 2009
AO	Researcher	MIRS, Makerere University	9 May 2009
AP	Teacher	Jinja S.S. School	27-31 July 2009
AQ	Deputy director	Department of Planning, Ministry of Education, Youth, and Sport	5 July 2010

AR	School principal	Hun Sen Kandeang Upper Secondary School	2 February 2009

III. School and classroom observation

The following schools were observed during the fieldwork.

Name	Place	Date
1. Chao Ponchea Hok Primary School	Phnom Penh	10 October 2008
2. Khleng Primary School	Ba Phnom district, Prey Veng province	17-18 October 2008
3. Khleng Lower Secondary School	Ba Phnom district, Prey Veng province	17-18 October 2008
4. Ba Phnom Upper Secondary School	Ba Phnom district, Prey Veng province	17-18 October 2008
5. Build Bright University	Sihanouk Ville	7 October 2008
6. Life University	Sihanouk Ville	7 October 2008
7. University of Management and Economic	Sihanouk Ville	7 October 2008
8. Svay Rieng University	Svay Rieng province	17 October 2008
9. Pourthereach Lower Secondary School	Svay Rieng province	17 October 2008
10. Royal University of Phnom Penh	Phnom Penh	Visit several times
11. Baktouk Primary School	Phnom Penh	12 September 2008
12. Wat Kok Upper Secondary School	Phnom Penh	11 September 2008
13. Toultompoung Upper Secondary School	Phnom Penh	25 September 2008
14. Taprok Lower Secondary School	Chamkaleu district, Kampong Cham province	4 December 2008
15. Reamchek Primary School	Chamkaleu district, Kampong Cham province	4 December 2008

16. Kandolchhroum Primary School	Kanchhreak district, Kampong Cham province	3 December 2008
17. Steng Primary School, Kanchhreak	district, Kampong Cham province	3 December 2008
18. Kokor Primary School	Kampong Siem district, Kampong Cham province	2 December 2008
19. Kos Dom Primary and Lower Secondary School	Sampove Meas district, Pursat province	2 February 2009
20. Hun Sen Kandeang Upper Secondary School	Kandeang district, Pursat province	2 February 2009
21. Prek I primary School	Kravachh district, Pursat province	2 February 2009
22. Prek II primary School	Kravachh district, Pursat province	2 February 2009
23. Mbarara Municipal School	Mbarara district	30 April 2009
24. Nyabikongu Primary School	Nyabikongu village, Mbarara district	30 April 2009
25. Ntare School	Mbarara district	30 April 2009
26. Mutesa Primary School	Wakiso district	22 May 2009
27. Nkumbe Primary School	Wakiso district	29 May 2009
28. Najja High School	Kampala	4 June 2009
29. Makerere College School	Kampala	4 and 9 June 2009
30. St. Paul High School	Ntygamo	10 June 2009
31. Kyamate S.S. School	Ntygamo	10 June 2009
32. St. Mary's College	Wakiso	16 June 2009
33. Jinja SS School	Jinja district	27-30 July 2009
34. Buwenda Primary School	Jinja district	28 July 2009
35. Uganda Technical College	Mbale district	24 August 2009

IV. Training workshop and conference

Participated in 'Training workshop on quality assurance for assessor', organized by Accreditation Committee of Cambodia, (supported by the World Bank) held 7-10 October 2008, Chhne Thmey Hotel, Sihanouk Ville.

Participated in 'The 3rd National Conference on Cambodia toward Decade of Education for Sustainable Development 2005-2014: Higher education and sustainable development', organized by the Institution of Humanities and Social Science, Royal Academy of Cambodia (supported by UNESCO) held 27-38 October 2008, Royal Academy of Cambodia, Phnom Penh.

Participated in 'Workshop Presentation on CESSP School Leadership Team over the Past 3-4 Years in Underserved/Remote Provinces', organized by The Cambodian Education Sector Support Project (CESSP) and the NGO Education Partnership (NEP) held 20 November 2008, Save the Children Norway, Phnom Penh.

Participated in National Conference on Mainstreaming Gender into the Education Sector, organized by Ministry of Education, Youth and Sport, and Gender and Development for Cambodia, held 24-25 November 2008, Phnom Penh Hotel, Phnom Penh.

Participated as a reviewer in a panel committee in 'Project Presentation, in Partial Fulfillment for the Requirement for Master's of Education', Royal University of Phnom Penh, held 6-7, 13-14 December 2008.

V. Focus group discussion

The first group discussion consisted of 13 students from various higher education institutes, both public and private, in Phnom Penh, Cambodia, 30 August 2008.

The second group discussion consisted of five student-teachers in various specializations from National Institute of Education in Phnom Penh, Cambodia, 31 December 2008.

The third group discussion consisted of four teachers including a school principal and secretary who teach various subjects from two primary schools in Kampong Cham, Cambodia, 2 December 2008.

The fourth group discussion consisted of seven teachers who teach various subjects from Jinja SS School in Jinja district, Uganda, 28 July 2009.
The fifth group discussion consisted of 13 students from Jinja SS School in Jinja district, Uganda, 29 July 2009.