

Section 5. Human Resource Development

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1. Analysis of the current situation

1-1 Background

Modern education was introduced in Cambodia between 1955 and 1969 under the Prince Sihanouk regime, following the example of the education system of France, Cambodia's former suzerain. Amid growing nationalism, a movement to teach in Khmer gained ground and Cambodia's education system took shape during this period. The Sihanouk government spread education across the country. To secure a sufficient number of schools, the government encouraged the use of Buddhist schools as schools for general education and the establishment of private schools. As a result, the gross school enrollment rate increased to about 82% in 1965.

The Pol Pot regime between 1975 and 1979 changed all that. The regime rejected the education system itself, and the system was destroyed. For example, at least 75% of schoolteachers were lost. Textbooks and curriculums developed between the 1960s and the early 1970s were discarded. Schools were also used as substitute detention camps or prisons for holding anti-Pol Pot elements.¹ Such extensive destruction has been a great hindrance to the subsequent efforts to restore the education system in Cambodia.

On September 27, 1979, after the collapse of the Pol Pot regime, schools were reopened under a new government. People's expectations for the resumption of education services were high, as they had been deprived of the opportunity for education under the Pol Pot regime. This translated into a rapid quantitative expansion in education. For example, primary school enrollment jumped from 510,000 in 1979 to 910,000 in 1980. In 1985, the gross enrollment rate was about 101% with the net enrollment rate at about 82%. The new government assigned literate people who had survived the Pol Pot regime as schoolteachers in order to respond to people's eager demand for education. However, the fact that the rapid quantitative expansion in education was achieved at the expense of the quality of education has

been a factor in the high dropout and repetition rates up to the present.

Another major challenge was to set up schools to achieve a quantitative expansion in primary education. Cambodia needed to open about 2,000 new primary schools to cope with an upsurge in the number of applicants for enrollment, although the schools buildings had not actually been destroyed under the Pol Pot regime. To meet this demand, Cambodia built primary schools with the participation of local residents—a traditional form of setting up schools—in many parts of the country. However, the number of such schools built was limited due to the economic conditions of local communities. Classes were held in the open air or at community centers or other facilities in villages where classrooms were in short supply. The construction of schools that depended on the participation of local residents gained ground in the late 1980s, when development assistance was offered chiefly by NGOs. Many Japanese NGOs also participated in such assistance. This school construction movement gained momentum in the 1990s, supported by funds from NGOs and other donors.

Opportunities for secondary or higher education were limited to a small number of Cambodians, since this education had been traditionally regarded as a privilege of the elite. Above all, higher education was open only to a fixed number of students in the planned economy under the socialist regime. Every year, each government ministry submitted the number of new recruits it needed as candidates for administrators and engineers. Based on these figures, the quota for higher education was established. Thus, those who had completed higher education were guaranteed posts as high-ranking officials. During the 1980s, assistance in this sector came mainly from the Soviet Union and, to a lesser extent, from East European countries. The Russian language was used for secondary or higher education, and teaching materials and research equipment were provided by the Soviet Union. Instructors and students at higher educational institutions in Cambodia were sent to the Soviet Union, East European countries, and Vietnam as trainees. In the 1990s, however, the donor countries

¹ Reiff (1981).

changed from Eastern to Western nations as the market economy was introduced to Cambodia. The language of instruction also changed from Russian to English. Teaching materials and equipment therefore became obsolete under the Western-oriented education system, and Cambodia was required to introduce new materials and equipment.

1-2 Cambodia's education system today

1-2-1 Education policy

Cambodia now needs human resources that can contribute to the ongoing process of the country's reconstruction and the transition to a market economy. For the country's reconstruction, Cambodia needs to provide every citizen with basic knowledge and skills. To ensure a smooth transition to a market economy, Cambodia needs to develop human resources with specialized and advanced knowledge and skills besides the development of a medium-level capacity. Under the Pol Pot regime, the country largely lost its human resources with middle or higher levels of capability.

The Education Investment Framework 1995-2000, prepared in 1995, cites universal access to primary education and reinforcement of (lower) secondary education as priority agendas. The framework sets out the following five items as goals for primary education:

- (i) To extend the period of primary education by one year, establishing a 6-3-3 system—six years for elementary school, and three years each for lower and upper secondary schools,
- (ii) To increase the net primary enrollment rate to 90%,
- (iii) To close the gender gap,
- (iv) To reduce the repetition rate to around 10%, and
- (v) To ensure that at least 85% of pupils complete six years of primary education.

As goals for (lower) secondary education, the framework sets forth the following three items:

- (i) To increase the net lower secondary enrollment rate to 85%,
- (ii) To increase the proportion of female students to 45%, and
- (iii) To increase the percentage of third-grade lower secondary students who pass the lower secondary completion examination to 65%.

To achieve these goals, an implementation plan has

been formulated. The plan aims to:

- (i) Upgrade the quality of basic education,
- (ii) Ensure equal access to basic education, and
- (iii) Reinforce the education planning capacity and management.

In relation to donors, the implementation plan intends to:

- Raise awareness of the need for educational development in Cambodia in a bid to attract development assistance in general and obtain donor support for specific projects, and
- Promote coordination and adjustment among donors in implementing educational development projects.

The implementation plan serves as the basis for the ongoing education program. At the moment, an education investment plan for 2000 onward is being drafted.

Earlier, the Cambodian Ministry of Education, Youth and Sport (MoEYS) set out more specific goals for educational development to be achieved by 2000 in response to the appeal by the World Conference on Education for All (EFA) in 1990. As a follow-up report, the MoEYS recently published "Education For All: Country Report 2000," reviewing the achievements for EFA. The report examined the gap between the target and the performance for each indicator as shown in Table 5-1.

This table highlights huge gaps in expenditure on education. For example, the percentage of educational expenditure to GDP is far below the target of 2.5% (or 10% on a per capita basis) even though this target has been set below the international standard of about 3% (or about 15% on a per capita basis). This indicates the need to boost educational investment even further. The percentage of expenditure for primary education to the total expenditure on education is 85%, far above the international standard of around 50%. This means that most of the educational expenditure is allocated to primary education with secondary and higher education receiving only a small proportion of 15%. A review of the budget allocation is urgently needed if Cambodia wants to expand secondary and higher education.

1-2-2 Educational administrative system

The Ministry of Education, Youth and Sport (MoEYS) has education offices in 23 provinces. Each education office serves as an agency for educational administration in its province. Each province, depending

Table 5-1 Educational Indicators and Targets in the Education For All: Country Report 2000

Indicator/item	Performance			Target
	1990/91	1996/97	1998/99	2000
Pre-school education				
1) Gross enrollment rate		5.4	5.8	7.0
2) Percentage of new entrants		8.4	9.2	10.0
Primary education				
1) Gross intake rate		113	103.3	106
2) Net intake rate		69.4	62.4	70.0
3) Gross enrollment rate		94.5	89.7	95.0
4) Net enrollment rate		84.7	78.3	86.0
5) Current educational expenditures as a percentage of GDP	1.1	0.8	0.9	2.5
6) Current educational expenditures as a percentage of GDP per capita	8.2	4.9	5.2	10.0
7) Current expenditures on primary education as a percentage of total education expenditure		70.8	89.9	85.0
8) Percentage of primary education teachers who graduated from teacher training school*			90.7	91.0
9) Percentage of primary education teachers certified to teach*			95.2	96.0
10) Pupil-teacher ratio		44	48	40
11) Repetition rate		27.7	24.9	10.0
12) Graduation rate (of Grade 1 entrants)		50.7	45.2	55.0
Learning achievements and outcomes				
1) Percentage of the 4th graders who attained basic learning competencies		70.0	71.9	75.0
2) Literacy rate for the 15-25 age bracket	60.0	71.5	75.0	76.0
Adult literacy rate				
1) Literacy rate of the population aged 15 years or older	57.7	65.9	68.0	85.0
2) Ratio of the female literary rate to male literacy rate				
2-1) 15-24 years of age	0.6	0.7	0.8	0.9
2-2) 15 years of age or older	0.5	0.7	0.7	1.0

* Teacher's licenses include those granted after receiving a short training course or those renewed during the reconstruction period of the 1980s.

Source: Ministry of Education, Youth and Sport (2000)

on its size, has a department in charge modeled after the structure of the MoEYS.

The National Programme to Rehabilitate and Develop Cambodia (NPRD) published in 1994 sets out a guideline for bolstering the capacity and functioning of the central government required for the nation's reconstruction. In the guideline, the MoEYS lists the following items as the objectives of administrative reform:

- (i) Reform for a more efficient administrative machinery,
- (ii) Strengthening of each competent department,
- (iii) Human resources development,
- (iv) Efficient distribution and control of personnel, and
- (v) Defining the roles and responsibilities of the central and local government.

Under the NPRD, the MoEYS has taken the following actions:

- (i) Transferring a surplus of personnel totaling about 1,000 at the central government level to schools short of teachers and to provinces where educational administrators are in short supply,

- (ii) Organizational reform within the MoEYS, and
- (iii) Offering training to educational administrators at the central and provincial levels.

Since the organizational reform of the MoEYS in 1998, the function of monitoring and assessing educational projects has been strengthened.

1-2-3 The current situation and problems at each level of education

(1) Basic education

The period of primary education was extended by one year in accordance with the Education Investment Framework in 1996. As a result, a 6-3-3 system like the Japanese system—six years for elementary school, and three years each for the lower and upper secondary schools—was established.

The gross enrollment rate at the primary education level was rather high—some 94% in the 1997 school year as shown in Table 5-1. The net enrollment rate, on

Table 5-2 Promotion, Repetition and Dropout Rates by Grade at Primary Schools

School year	Enrollments (out of 1,000 pupils)			Promotion rate (%)			Repetition rate (%)			Dropout rate (%)		
	Grade 1	Grade 3	Grade 5	Grade 1	Grade 3	Grade 5	Grade 1	Grade 3	Grade 5	Grade 1	Grade 3	Grade 5
1992/93	544.6	254.8	137.6	49.2	66.0	63.0	41.9	22.8	18.1	8.9	11.2	19.9
1993/94	619.6	270.6	162.7	49.4	64.9	45.6	40.4	23.1	36.7	10.2	12.0	17.7
1994/95	596.9	280.6	198.0	51.9	64.5	43.1	42.2	22.1	29.8	5.9	13.4	27.1
1995/96	638.4	311.6	200.3	50.0	68.0	55.8	42.7	21.5	25.0	7.3	10.5	19.2
1996/97	678.9	331.1	150.0	46.9	65.9	71.3	41.2	19.2	7.5	11.9	14.9	21.2
1997/98	666.7	335.3	183.2	48.4	67.4	76.3	40.9	18.5	7.5	10.7	14.1	16.2
1998/99	681.0	349.7	200.8									

Source: UNESCO (2000)

Table 5-3 Gross Enrollment Rate by Level of Education (1997)

	Male	Female	Total
Primary	94.5	86.4	94.5
Lower secondary	38.2	22.7	30.5
Upper secondary	9.4	5.0	7.2

Source: Ministry of Education, Youth and Sport (1997)

the other hand, remained low as in the 1980s—at about 78% in 1998.

As has long been pointed out, high numbers of dropouts and repetition rates constitute another problem. Table 5-2 shows that the dropout rates for primary school grades ranged from 10% to 15% and the repetition rate for the first grade remained at about 40%. However, the repetition rate for the fifth grade decreased as the graduation examination for fifth graders (then the final grade at primary school) was abolished in the 1996 school year.

The gross enrollment rate for 1997 is about 30% for lower secondary education and only 7% or so for upper secondary education as shown in Table 5-3. This highlights a substantial gap between the performance and the target set by the Education Investment Framework. Access to secondary education, especially upper secondary education, is limited, suggesting that it is still regarded as education for the elite. As shown in Table 5-4, the enrollment rate for primary education in Cambodia is roughly on a par with that in its Asian neighbors. However, Cambodia's enrollment rate for both lower and upper secondary education is the lowest among the Asian countries, highlighting the need to expand secondary education.

In 1996, a new curriculum was introduced for pupils and students who entered schools as first graders in 1996 or later. Under the new curriculum, revised textbooks were distributed. The Ministry of Education,

Table 5-4 Enrollment Rates for Primary and Secondary Education in Asian Countries

Country	Primary education		Secondary education
	Gross enrollment rate	Net enrollment rate	Gross enrollment rate
Brunei	110	91	78
Cambodia	95*	85*	19*
China	118	99	67
India	100		49
Indonesia	114	97	48
Laos	110	60**	25
Malaysia	91	91	57
Myanmar	103		30
Nepal	110		37
Pakistan	74		
The Philippines	116	100	79
Sri Lanka	113		75
Thailand	87		55
Vietnam	101	78***	47

Source: UNESCO Statistical Yearbook 1998, except for those marked with one or more asterisks as shown below:

* MoEYS (1997)

** The World Bank (1995)

*** Prescott (1997)

Youth and Sport did all it could to distribute on loan one or two textbooks per pupil. In 1997, the ministry launched propagation seminars designed to communicate to teachers the objectives of the new curriculum and the revision of textbooks, together with new teaching methods. These seminars were held on the basis that they would create a ripple effect. At the primary school level, a cluster school system is being implemented across the country. The idea is to group a few schools into one cluster so that teachers can use limited teaching materials efficiently and share their experience for better lessons through improved teaching methods, among other means, and for better school management. Cambodia is considering introducing this approach in

lower secondary schools.

Teacher training is provided at the following teacher training institutions at three levels. Provincial Teacher Training Centers (PTTCs) in 17 major provinces train primary school teachers. Regional Teacher Training Centers (RTTCs) in the six educational regions into which the country is divided, train lower secondary school teachers. Graduates from upper secondary schools are qualified to take a two-year course at PTTCs and RTTCs. The Faculty of Pedagogy (FOP) trains graduates of Phnom Penh University to be upper secondary teachers in a one-year course.

The problem is the low quality of teacher training. Because there is no clear policy for teacher training, curriculums and teaching materials for this purpose are underdeveloped. In addition, the qualifications and recruiting criteria for trainers at these teacher-training institutions are not clearly defined. Cambodia therefore needs to improve teacher-training curriculums and set up definite criteria for teacher's licenses. Cambodia also needs to improve teacher-training facilities and upgrade the teacher-training centers to teacher-training colleges.

According to MoEYS statistics for 1998, the number of primary school pupils per teacher is about 48, while the number of lower secondary students is around 17. The situation is particularly serious at primary schools in urban areas; the number of pupils per teacher is as many as 87. These schools have no choice but to hold double or triple sessions. Because primary schools are in short supply, the number of pupils per teacher may reach 50 against the year 2000 target of 40 as shown in Table 5-1. To rectify the situation, Cambodia has been recently diverting some of the newly graduates of the Faculty of Pedagogy to primary schools. The number of these new teachers is rather more than required at the upper level schools.

During the 1990s, more than 1,200 schools were renovated or newly constructed with the assistance of NGOs, the World Bank, individuals, including Prime Minister Hun Sen, and other organizations.² For security reasons, these schools have concentrated on cities including Phnom Penh and their surrounding areas and on the plains where there are no security problems. Therefore, a substantial number of schools in rural areas are thought to be in need of renovation or replacement.

According to MoEYS statistics for 1998, some 600 schools remain partially destroyed.

(2) Vocational and technical training

Vocational and technical training falls under the jurisdiction of a number of ministries. Although the MoEYS's main task is to manage public education or compulsory education, it has jurisdiction over vocational and technical training, non-formal education, and higher education as well. The Ministry of Social Welfare, the Ministry of Women's and Veteran's Affairs, and other ministries also manage or supervise vocational training and non-formal education. Ministries other than the MoEYS offer vocational training courses with periods of less than one year.

According to the MoEYS statistics for 1998, there are 24 public vocational training institutions with a total enrollment of about 5,300 under the jurisdiction of the MoEYS and other ministries. In addition to these institutions, many others are operated by NGOs and the private sector. Vocational training institutions train refugees and displaced persons, landmine victims, the physically disabled, and the illiterate to support themselves. In recent years, computer schools, English schools, business schools and other types of schools have been set up in Phnom Penh and other cities. These schools offer Cambodians opportunities to acquire qualifications for working in private businesses or donor-related development projects.

Technical training courses are offered at Phnom Penh Institute of Technology. The courses are lecture-oriented because teaching materials and equipment are in short supply.

Vocational and technical courses offered by private schools vary in content and level. This is partly because there are no criteria for setting up private schools. They are therefore easy to establish if there are enough funds to do so. In 1997, the National Training Board was set up with the aim of maintaining the quality of vocational training institutions, including private ones, at a certain level and improving the quality of vocational and technical training in Cambodia. The Board is set to formulate development plans concerning vocational and technical training.

² MoEYS, PMMU Database, 1996.

Table 5-5 List of Higher Educational Institutions

	Name	Competent ministry
1	Royal University of Phnom Penh	MoEYS
2	Faculty of Pedagogy	MoEYS
3	Faculty of Commerce	MoEYS
4	Faculty of Medicine	MoEYS
5	Faculty of Law and Economics	MoEYS
6	Cambodia Institute of Technology	MoEYS
7	Royal College of Agriculture	Ministry of Agriculture
8	Royal College of Arts	Ministry of Culture
9	Maharish Bedick University	MoEYS (private university)

Source: Prepared by the author

(3) Higher education

According to the MoEYS statistics for 1998, there are nine higher educational institutions, including Phnom Penh Institute of Technology in Cambodia with a total enrollment of about 9,000 (see Table 5-5). These institutions were originally faculties of the Royal University of Phnom Penh. However, after the fall of the Pol Pot regime, these faculties were restructured as independent entities. These independent institutions are therefore called Faculties of Phnom Penh University. With the exception of the Faculty of Medicine, Royal College of Agriculture, and Royal College of Arts, these institutions are under the jurisdiction of the MoEYS. Yet all the MoEYS does is to maintain coordination among the institutions and supervise their management. The details of the courses each institution offers are up to the ministry concerned. These institutions are expected to gain more autonomy from the MoEYS. They may even change their names.

Higher education reform is underway with the establishment of the National Higher Education Task Force in 1996. To meet the social needs associated with the transition to a market economy, the task force has come up with recommendations on the reform of the university system and subjects taught, languages of instruction and language education, as well as the reform of financial and management systems. Based on these recommendations, a national action plan has been drawn up.

The task force is now drafting a plan for making universities more self-sufficient. Traditionally, higher educational institutions have been in a financial bind, with limited allocations from the national budget and with no operating revenue because there are no tuition fees. As

a result, teaching staff are forced to exist on low pay and the research facilities are in a bad state of repair. This, in turn, leads to a low quality of education provision, forming a vicious circle. In a bid to acquire revenue, some institutions offer fee-paying courses to outsiders. They are now looking to collect tuition fees from students.

1-2-4 Donor assistance by educational sector

Table 5-6 is a list of donors by educational sub-sector as of 1997. The table shows that donors are involved in almost every sub-sector. Generally speaking, EU, USAID and UNICEF specialize in primary education, putting particular emphasis on curriculum development and teacher training. Overall, many donors, including NGOs, extend assistance to the primary education sector. The World Bank has assisted with the construction of schools, totaling about 600 to date, through its social funds. ILO and GTZ address the sector of vocational and technical education, among other areas. ADB assists Cambodia in formulating an education investment plan and a master plan. Through such technical assistance, ILO, GTZ and ADB address Cambodia's education administration and other sectors and try to play a catalytic role in the sectors concerned.

On the other hand, many NGOs offer assistance in the construction of schools, improvement in education services, and literacy and vocational education aimed at alleviating poverty. These NGOs often work with UNICEF and other donors. UNICEF, for its part, assists Cambodia mainly in improving the Education Management Information System (EMIS) and the cluster school system at the primary education level, and in developing curriculums. ADB covers the whole process of textbook development, including printing, binding and distributing textbooks. EU extends assistance in renovating and building teacher training schools.

Japan also extends assistance in the education sector. JICA has dispatched experts to Cambodia for strengthening education management and education for girls. In 2000, JICA launched small-scale programs of project-type technical assistance. No other donors are extending assistance in these sectors, especially in improving science and mathematics education at the secondary level. JICA's assistance is expected to expand in these sectors. Japanese NGOs, for their part, are developing

Table 5-6 Donor Assistance

		Pre-school education	Primary education	Lower secondary education	Upper secondary education	Higher education	Vocational and technical education	Non-formal education
Education administration	Education policy/management	UNESCO/UNDP/ADB/EU/JICA/USAID/DFID/WB						
	Financial capacity building	AusAID						
System improvement	Improvement in the quality and quantity of educational information	EU/UNICEF/ADB						
	Reform of the exam system	AusAID						
Improvement in education services	Teacher training	NGOs	USAID/UNICEF/EU/NGOs	DFID/NGOs • France	JICA/NGOs	NGOs • AusAID/France	ADB/France/GTZ/ILO/UNDP/NGOs	NGOs • UNESCO/ADB/GTZ/
	Improvement in curriculums		UNICEF/UNESCO/UNFPA/NGOs	UNFPA/NGOs		WB/AusAID/NGOs	GTZ/ILO/UNDP/NGOs	ILO/UNDP/UNICEF
	Development of textbooks and teaching materials	NGOs	ADB/NGOs	ADB/France/EU/DFID	ADB/DFID/France	NGOs	GTZ/ILO/UNDP/NGOs	
Educational infrastructure	Renovation and construction of schools	NGOs	WB/Japan/EU/NGOs	WB/ADB/EU/NGOs	ADB	ADB/France	ADB/France/GTZ/ILO/UNDP/NGOs	

Source: Prepared by the author

and implementing their assistance projects in a variety of sectors, including school construction, preschool education, school health, and vocational training. They are committed to community participation in conducting their projects. For example, they try to approach temples and communities directly.

2. Major development agendas and problems

2-1 Problems and agendas for education administration

2-1-1 Limitations to formulating and implementing education plans under the centralized regime

The Cambodian government, with the MoEYS at its center, has already formulated various education plans. Yet most of these are comprehensive plans at the national level. The government has not conducted specific micro planning at the provincial or lower levels. To assess the educational needs for each school and each province, the Cambodian government conducted school mapping in 1996 with EU assistance. However, the government has not yet formulated education plans at the provincial or district levels based on the results of

this school mapping. Partly because of this, educational needs at the local level have not been reflected in education policies at the central level, and there has been no specific implementation planning at the provincial or lower levels. In addition, educational programs are said to be inefficient as they are being implemented on a top-down basis.

2-1-2 Politics and the education administration system

Although political confrontation in Cambodia has eased in recent years, the FUNCINPEC Party and the Cambodian People's Party share similar posts within the MoEYS. Therefore, duplication and confusion often occurs within the ministry, resulting in inefficient education administration. For efficient education administration, the MoEYS needs highly skilled staff specializing in education administration who are not swayed by political considerations. To meet this need, donors have to give priority to training specialized staff and counterparts in their education development projects.

The need to build up specialized capacity of the administrative staff is not limited to the education sector. The lack of specialized capacity is common to all political and administrative sectors. This constitutes the ba-

Table 5-7 Regional Disparities in the Enrollment Rate

		Primary school		Lower secondary school		Upper secondary school	
		Gross enrollment rate	Net enrollment rate	Gross enrollment rate	Net enrollment rate	Gross enrollment rate	Net enrollment rate
Urban areas	Total	99.5	84.6	45.7	28.1	24.8	18.2
	Female	94.1	81.0	35.6	24.3	18.1	14.3
Rural areas	Total	93.9	82.6	18.7	11.5	3.5	2.6
	Female	87.6	77.8	12.0	8.2	1.9	1.6
Remote areas	Total	50.6	45.5	0.8	0.4	0	0
	Female	46.3	42.1	0.5	0.3	0	0
All areas	Total	89.7	78.3	23.0	14.2	8.7	6.4
	Female	83.9	74.1	16.1	11.1	6.0	4.8

Source: Ministry of Education, Youth and Sports (1998)

sis for improper and slow decision-making, misconduct, and corruption in these sectors. Therefore, it should be emphasized that training personnel to acquire specialized skills in every administrative sector is the first step to good governance and institution building. This is particularly important for the education sector, which requires personnel with a wide range of specialized skills, including, teachers, principals, school inspectors, teacher-training staff, and education administrators.

2-1-3 Declining ethics of teachers and other employees

A majority of civil servants in the education sector have a side job to supplement their low pay, which averages about 25 dollars per month. Yet a decline in their ethical conduct has been pointed out as follows:

- (i) Some teachers, too busy with their side job, neglect their duties at school and fail to teach classes as regulated.
- (ii) Some teachers offer supplementary lessons for a fee in addition to regular classes, giving rise to disparities between children who can afford such a fee and those who cannot. This, in turn, leads to a situation where only those children who take such supplementary lessons are allowed to pass promotion exams.
- (iii) Those teachers who offer such supplementary lessons tend to neglect their regular duties.

It is also pointed out that the daily rate of pay and other forms of compensatory pay to participants in education projects are contributing to a decline in ethical conduct and sense of project ownership on the part of employees at the MoEYS. Many employees work half the day at the MoEYS and spend the rest of the day on

their side job since their salary is too low to support their families. If they are required to perform a full-time duty or participate in a full-time seminar for a donor-assisted project, they tend to press the donor to compensate them with daily pay or other forms of compensatory pay. In fact, such a practice has become the norm. Therefore, after the period of assistance is over, these projects are not sustained in many cases.

2-2 Problems with primary education

2-2-1 Regional disparities

Table 5-7 shows the disparities in the enrollment rate between urban, rural, and remote areas. According to the table, the disparity between urban and rural areas is small at the primary school level, but large at the levels of lower and upper secondary schools. Access to secondary education is extremely limited in remote areas. Such regional disparities in the enrollment rate arise for the following reason. Because lower and upper secondary schools are concentrated in the urban areas of each province, would-be students in rural areas have to board at the homes of relatives or temples near their schools. Therefore, only children whose families can afford such boarding facilities have access to secondary education. In addition, parents are reluctant to let their daughters leave the home because girls play an important role in household work. As a result, the enrollment rate for girls at the secondary level is substantially lower than that for boys.

Another major reason for regional disparities is that the absolute number of lower and secondary schools is small in the first place in remote areas such as border areas and mountainous regions. For example, the num-

ber of pupils per teacher in the 1998 school year was 60.5 in remote areas compared with 45.1 in urban areas and 48.2 in rural areas, highlighting the regional disparity due to the lack of schools in remote areas. The MoEYS has been dispatching teachers to these areas to alleviate the disparity, but this action has not produced the expected results. These dispatched teachers tend to quit before their term expires. They cannot use Khmer as the language of instruction in, for example, the mountainous region bordering Vietnam where ethnic minorities live. In addition, they often have difficulty in adapting to the lifestyle and customs in such remote areas.

2-2-2 High dropout and repetition rates

The following problems have been pointed out as the cause of the high dropout and repetition rates in Cambodia's primary education:

- (i) Not all primary schools provide education up to the sixth grade in many parts of the country. In fact, at about half of the primary schools in Cambodia, pupils can receive education only until they become third graders or fourth graders. After that, they are regarded as non-attendees or dropouts.
- (ii) Because subjects are not adequately or appropriately taught at each grade, many pupils cannot move on to the next grade.
- (iii) Some preschool children prematurely enter primary schools with their elder siblings as first graders. Unable to follow classes, they tend to repeat the first grade.
- (iv) Some parents cannot keep paying education expenses until their children reach the upper grades.
- (v) Some parents do not let their children go to school because they are an important part of the work force.
- (vi) Many parents cannot afford to pay unofficial tuition fees to teachers as described in the previous subsection.

The extent to which the above causes are relevant varies greatly from region to region. As a result, there is a significant regional disparity in the dropout rate. For example, the dropout rate in the 1997 school year was 9.2% in urban areas, 15.2% in rural areas, and 26.2% in remote areas. Some of the reasons for this are detailed below.

Table 5-8 Proportion of Primary Schools Providing Education up to Various Grades

School type	Proportion of all primary schools
Schools providing up to Grade 1	7.2
Schools providing up to Grade 2	13
Schools providing up to Grade 3	11.2
Schools providing up to Grade 4	8.2
Schools providing up to Grade 5	8.6
Schools providing up to Grade 6	51.7

Source: MoEYS (2000)

Table 5-9 Changes in the Numbers of Pupils and Primary Schools

School year	Enrollment	Number of primary schools
1990/91	1.32	4665
1991/92	1.37	4555
1992/93	1.47	4539
1993/94	1.62	4693
1994/95	1.71	4744
1995/96	1.81	4845
1996/97	1.92	4899
1997/98	2.01	5026
1998/99	2.09	5156

Note: Enrollment is given in millions of pupils.

Source: UNESCO (2000)

(1) Lack of a complete primary school course or schools that cover 1st through 6th grade

Table 5-8 shows the percentages of six types of primary schools to all primary schools. Complete schools, that is, schools having first-grade classes up to sixth-grade classes, account for only about 52% of the total. That means that about half of the primary schools in Cambodia do not have sixth-grade classes. Pupils at such schools have to change to a complete school if they want to move on to the upper grade. Complete schools tend to be located in urban areas, meaning that pupils have to travel longer distances and pay more for travel expenses to go to such schools. This constitutes a factor in dropping out of school.

(2) Insufficient number of schools

Table 5-9 shows the increase in the number of pupils and primary schools since 1990. While the number of pupils increased nearly twofold between 1990 and 1998, from about 1.3 million to some 2.1 million, the number of primary schools rose by only 500 or slightly over

10% during the same period, from around 4,600 to about 5,100. According to the 1997 census, about 30% villages do not have schools, constituting a barrier to increasing the net enrollment rate to 100%.

(3) Problems with curriculums and textbooks

Both the dropout rate and the repetition rate have not shown any signs of improvement even after the MoEYS introduced a new curriculum in 1996 and launched promotion seminars for teachers concerning the distribution and use of new textbooks. This implies that the new curriculum has had little impact in practice. In fact, many cases have been reported in which the new curriculum and textbooks are disregarded in classes and teachers teach classes with self-prepared notes as before.

The following reasons have been given for the poor performance of the new curriculum:

- Lack of a clear reform policy and strong leadership in formulating the new curriculum and developing new textbooks. This has resulted in a weakness in continuity and the interrelationship between the curriculum and the textbooks as well as inconsistency in the series of subjects.
- The number of pages of the textbooks or the number of items in them has not been reduced sufficiently to avoid excessive teaching contents.
- Although the MoEYS has launched promotion seminars to achieve a ripple effect, the highlights and objectives of the new curriculum, as well as the new guidance on teaching, including how to use the new textbooks, have not been fully communicated to teachers at the end of the process.

An attempt has been made in Vietnam to combat the above-mentioned problems and carry out educational reform that works in practice. In 1996, Vietnam launched educational reform for the first time in 26 years. In the reform of its lower secondary education, Vietnam has been taking the following steps:

- (i) Redefining lower secondary education on its own,
- (ii) Setting educational objectives and improving the makeup of each subject taught in line with economic development and modernization,
- (iii) Implementing the curriculum flexibly, or more specifically, combining core subjects and optional subjects,
- (iv) Consolidating subjects, and

- (v) Strengthening the linkages among primary education, secondary education, and vocational training.

In revising the curriculum and textbooks, Vietnam has made the following attempts:

- (i) Systemizing the curriculum and screening the elements of the subjects taught,
- (ii) Strengthening the linkage with the curriculum and textbooks, and
- (iii) Introducing a method of learning through discovery and hands-on experience.

As part of these attempts, Vietnam has reduced the number of pages of the mathematics textbooks by half. The country has also introduced a method of instilling a mathematical concept by induction based on each pupil's everyday experience. In addition, Vietnam has commissioned both curriculum formulation and textbook writing to the same group in an attempt to ensure continuity and systemization between the two. Cambodia needs similar coherent policies and plans for successful educational reform.

Different communities or people have different educational needs according to their specific problems. This is particularly true of Cambodia. In Cambodia, communities near mine fields need preventive education. Communities that have serious HIV or social problems need special educational treatment. Ethnic minorities may need curriculums adjusted to their peculiarities so that, for example, subjects are taught in their own languages, not Khmer. Rural areas and areas of poverty where some 70% of pupils in Cambodia live need a curriculum that closely reflects their living conditions in the form of integrated learning or local learning. Cambodians suffering from the after effects of the prolonged civil war, including those who have been disabled by landmines—totaling a considerable number in Cambodia—need special consideration in the form of vocational training and other forms of education.

Cambodia needs curriculums where teachers identify and meet these diversified needs at school, although that is rather difficult in the face of the limitations in terms of education administration.

Sound growth of the mind and body of pupils requires proper health and physical education at school. This is important in terms of human resources development as well. Schools need to manage the health of pupils and to offer appropriate advice and even treatment. In Cambodia, insufficient attention is being paid to the nutrition status and sanitary conditions of pupils

at home and in the communities. Specifically, Cambodia needs to introduce basic health and physical education and a regular health checkup system in cooperation with local doctors, provincial health departments, and others.

(4) Teacher training

Pre-service training is conducted at teacher training institutions for primary, lower secondary, or upper secondary schools. This is conducted at 17 PTTC, six RTTC and one FOP. This framework for teacher training was established as late as the 1990s. One problem is that these institutions lack sufficient textbooks and curriculums; all they offer is training on basic teaching methods and subjects in a lecture style. Another problem is that instructors at teacher-training institutions vary widely in their qualifications and their instruction lacks consistency since there is no qualification system for them. Training or capacity building programs for these instructors are virtually nonexistent. Therefore, it is difficult for teacher-training institutions to improve their teaching methods or conduct research for this purpose. Improving and upgrading instruction at these institutions is high on the agenda.

To make matters worse, in-service training for teachers on active duty is not in place, depriving them of the opportunity to improve their teaching skills. Although promotion seminars designed to explain the outline of the new curriculum and textbooks are held to impart information to successive levels, the outline is hardly cascaded down to teachers at the end of the line. A majority of teachers “in the trenches” are at a loss as to how to use the new textbooks. A number of actions should be taken to offer opportunities to improve the skills of teachers actively engaged in local communities. Such actions include the establishment of systems, facilities, and curriculums for training teachers, and the training of the actual instructors. Science and mathematics should receive special attention, because training in these fields, which requires more facilities, equipment and materials, lags behind training in other fields.

2-2-3 Non-formal education

There is a serious disparity between men and women in the adult literacy rate (15 years of age or older). According to the 1997 census, the literacy rate is 78% for

men and 57% for women, while the rate for both men and women is 67%. The disparity is greater for the low-income bracket, the lowest 20%. In this income bracket, the literacy rate is 74% for men and 49% for women with a gap of 25 percentage points. The disparity is less for the highest income group, the highest 20%. In this income bracket, the literacy rate is 88% for men and 69% for women with a gap of 19 percentage points.

Because the low-income group is unevenly distributed in rural areas, the importance of literacy education for women and girls in these areas should be emphasized. This is where non-formal education has an important role to play. It is necessary to open non-formal learning centers at the community level and develop literacy education programs for the illiterate, especially women and girls in rural areas. It is also necessary to consider expanding the non-formal education sector to deal with pupils who drop out of formal education.

2-2-4 Slow development of lower secondary education

The enrollment rate for lower secondary education is low. The rate was about 30%, well below the 2000 target of 85%. The basic reason for the low enrollment lies in the limited access to secondary education. According to the MoEYS statistics for 1998, there are only 480 lower secondary schools, including lycees, or schools offering both lower and upper secondary education, and 132 upper secondary schools in Cambodia, compared with 5,156 primary schools. Simple mathematics illustrates the situation: there is only one lower secondary school for every 11 primary schools.

Unless this imbalance is redressed, in other words, unless a significant number of lower secondary schools are established, the enrollment rate for lower secondary education could not possibly increase. This is a serious problem and is expected to be top of the agenda in the second round of EFA due to be launched in 2001.

If Cambodia wants to universalize lower secondary education, it needs to make enormous fresh investment in training teachers, improving teacher-training institutions in terms of both quality and quantity, printing and distributing textbooks, improving the quality and quantity of educational officers, and other measures. This will require a much larger share of the national budget for education expenditures.

Thailand has set a good example for Cambodia, which is required to significantly expand lower secondary education over the next ten years. The neighboring country established a universal secondary education program under the Seventh National Economic and Social Development Plan for 1992-1996. The program was designed chiefly to increase the ratio of sixth graders proceeding to the seventh grade to almost 100%. Under the program, the ratio exceeded 85% in many provinces in Thailand by the end of the plan.³

2-3 Human resources development and socioeconomic needs

2-3-1 Gap between the curriculums and socioeconomic needs

Many vocational and technical training institutions in Cambodia have no choice but to offer lecture-oriented courses with insufficient skills training because their training facilities are insufficient or outdated. For this reason, students who have completed a course at these institutions have difficulties in finding jobs. The prestigious Phnom Penh Institute of Technology and the Royal University of Phnom Penh are no exception. These circumstances highlight the need for improving education services and human resources development in line with the transition to a market economy.

Due to the globalization of the economy and the country's accession to ASEAN, Cambodia needs to develop human resources that can play an active role in various socioeconomic sectors at the international level. Yet Cambodia's system of human resources development remains unchanged, giving rise to a wide gap between the existing system and socioeconomic needs. This is highlighted by the problem of imbalance between supply and demand

Regarding human resources, in which experienced, productive people are in short supply while an increasing number of university graduates cannot find jobs.

Cambodia needs to promptly reform the existing curriculums at lower and upper secondary schools so as to close the gap between the curriculums and the socioeconomic needs. Specifically, primary education needs to offer curriculums where pupils acquire hands-on knowledge and skills. Secondary education needs to offer cur-

riculums where students acquire practical knowledge and skills, particularly in science and mathematics. Vocational and technical training needs to offer curriculums where trainees acquire practical skills that work at businesses and manufacturing plants. Such curriculums also need to promote entrepreneurship and creativity. Higher education needs to offer curriculums where the gap between academic knowledge and practical skills is bridged. To this end, universities need to introduce internship programs.

2-3-2 Unemployment issue for graduates of higher educational institutions

During the 1980s, higher education was integrated into the system of the planned economy. Graduates of higher educational institutions were guaranteed positions as administrators at ministries. After the transition to a market economy, however, such guarantees disappeared. In addition, Cambodia has begun to reduce the number of civil servants at the request of international donors. Therefore, the opportunity to become a civil servant is now limited. Yet many students still want to become civil servants. In addition, as mentioned earlier, universities have yet to offer curriculums in line with a market economy that enable students to secure a job in the private sector. For example, graduates of the Royal University of Phnom Penh have difficulty finding a job. This is because the university, which was originally established as an institution to train higher secondary school teachers, has not reformed its curriculums, although such teachers are now in good supply. In a bid to rectify the situation, Cambodia recruited a total of about 1,400 university graduates as primary school teachers in 1996 onward. However, this turned out to be just a stopgap measure, leaving the fundamental problem unsolved.

2-3-3 Mismatch between industrial development and curricula

After joining ASEAN in 1999, Cambodia is expected to achieve economic development commensurate with other ASEAN members as an actor in the Southeast Asia economic sphere. Cambodia's industrial development policy aimed at achieving such economic develop-

³ Wakabayashi (1995)

ment is set out in the First Socio-economic Development Plan (SEDP). Yet it is safe to say that the country's policy for human resources development in line with the first SEDP is not reflected in the guidelines and curricula for human resources development in school education. Moreover, there are no projections or plans regarding human resources—the human resources that will be needed in what sector and at what level. Nor is there any convincing proposal as to how the current education system should be reformed to this end.

2-4 Aid coordination

Many aid agencies have so far carried out various aid projects in the education sector. As a result, duplication or inconsistency has long been pointed out as an aspect of these projects. The Education Investment Framework was formulated in 1995 to control such “aid congestion.” Within this framework, the MoEYS set up an aid coordination department.

However, there is a limit to coordination concerning the conventional project approach, by which donors extend assistance to an individual project. And many problems have been pointed out. For example, the MoEYS reviewed the conventional aid approaches and identified the following problems:⁴

- (i) Each project involves restrictive conditions on the part of the donor, making coordination a complicated process.
- (ii) Consistency among projects is difficult to maintain.
- (iii) The project approach tends to lead to donor-led projects, allowing no room for capacity building on the part of the Cambodian government.

In a bid to solve these problems, coordination with a new sector-wide approach is being sought. In this new approach, donors extend aid as a basket fund to the education sector as a whole, unlike aid to an individual project in the past. Donors then work together to carry out efficient assistance—from policy formulation and fund allocation to program implementation—under the ownership of the recipient country.

In this approach, the donor community is expected to work together to promote development capacity formation and institution building on the part of the recipient country at each phase of the development assistance

process, including the setting of long-term development targets, formulation of a mid-term investment plan, implementation of consistent programs, and monitoring and assessment. As the sector-wide approach becomes the norm, the capacity to ensure coordination among donors and leadership at the planning and implementation stages becomes crucial. In addition, intellectual assistance becomes as important as, or more important than, physical assistance.

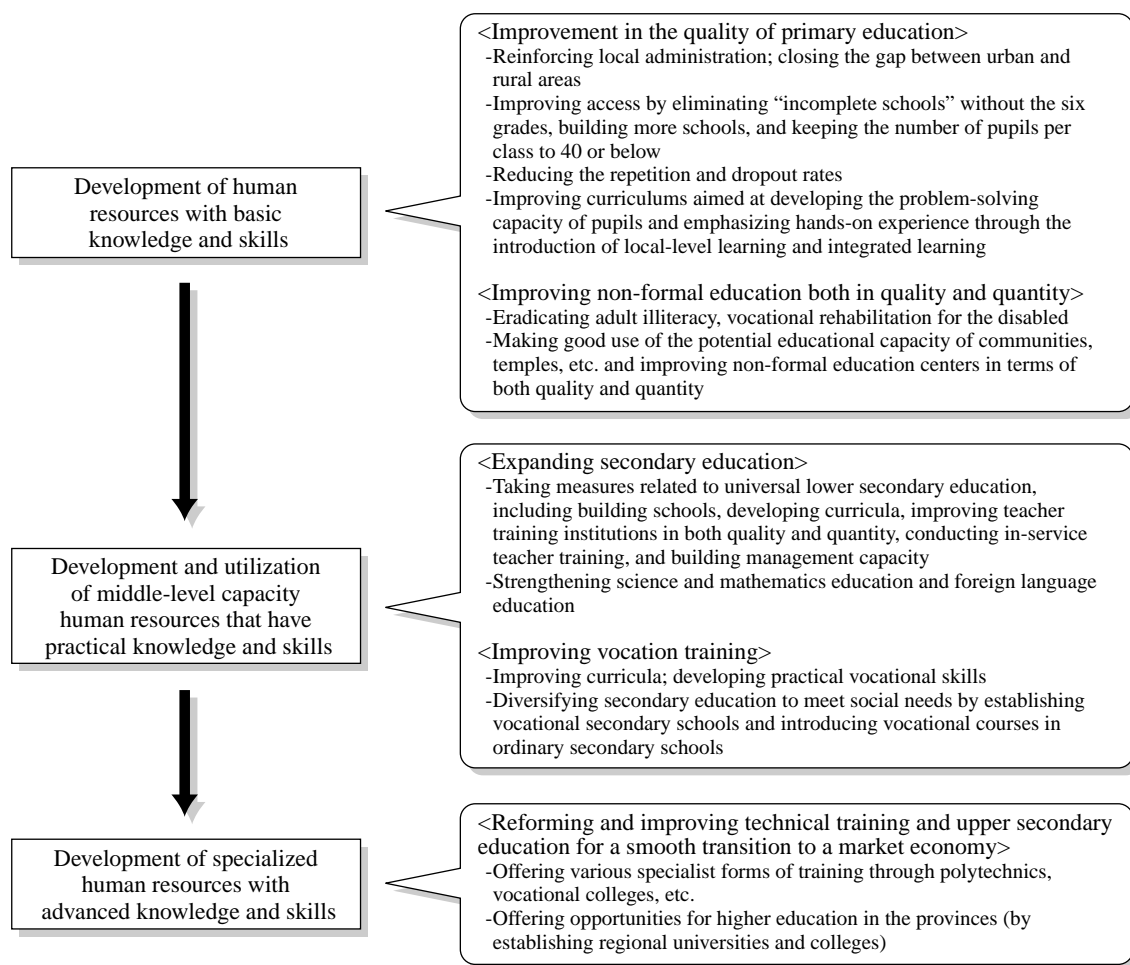
3. Mid-term prospects for human resources development

Regarding human resources development, Cambodia is urgently required to improve basic education in terms of both quality and quantity. At the same time, it is a matter of urgency for Cambodia to develop human resources that can cope with the progress of economic integration within ASEAN and the global transition to a market economy (globalization), especially human resources with specialized and advanced knowledge and skills as well as middle-level capacity within the range of human resources. These human resources should be assigned to Cambodia's administrative bodies in various sectors, including finance, the judiciary, the economy, trade, industry, education, health, and agriculture. Then they should be encouraged to build a fair and efficient administrative management system. In line with this, Cambodia also needs to upgrade human resources for the private sector.

Specifically, Cambodia needs to secure managerial and technical personnel. Industrial development in Cambodia cannot be realized unless the country establishes complementary relations with other ASEAN members in terms of trade and economy. In other words, the country needs to gain some kind of comparative advantage. In this case, productive human resources are the key since a policy of labor-intensive industrial development that takes advantage of the large pool of cheap labor is unrealistic for Cambodia, which is a small country. Therefore, Cambodia needs to develop competitive human resources that can contribute to the private sector, or more specifically, practical human resources backed by a good command of foreign languages and knowledge in science and mathematics. Regarding foreign languages, steady progress has been

⁴ MoEYS (1999)

Figure 5-1 Framework for Human Resources Development



Source: Prepared by the author

made with EU assistance. At the center of such efforts has been the Foreign Language Institute of the Royal University of Phnom Penh. Cambodia now needs to give priority to the practical development of human resources backed by knowledge in science and mathematics.

For the development of human resources described above, Cambodia needs a comprehensive education development plan that covers everything from primary and secondary education to vocation and technical training, and higher education. Cambodia also needs to develop an education system and educational human resources to support such a plan. The following subsections deal with mid-term prospects and major agendas based on Figure 5-1.

3-1 Improving the quality of primary education and expanding secondary education

The Cambodian government has been putting emphasis on primary education since the World Conference on Education for All in 1990. Donors, for their part, have been giving priority to this sector. As a result, substantial progress has been made in terms of curriculums, textbook printing and distribution, and school construction. Yet the quality of primary education remains low, as highlighted by the high dropout and repetition rates. Moreover, regional disparities and the gender gap in the enrollment rate and the literacy rate remain wide.

What has caused these problems in the process of educational reform? Because the educational policy during the 1990s was implemented on a top-down basis,

capacity building on the part of local educational administrations was insufficient. It is therefore likely that the process of education service delivery at the lowest level hit various obstacles. In fact, local governments, without full authority from the central government, did not develop a mechanism to assess the needs of schools and communities and formulate and implement programs designed to meet these needs at the provincial level or at the school level. Therefore, high on the agenda is the build up not only of the general capacity of education administrations at the local level, but also their capacity to formulate and implement educational programs at the local level or at the school level. As a consequence, the central government needs to delegate some of its authority to provincial governments.

Although primary education in Cambodia still has many problems in terms of its quality, the country needs to expedite its efforts to expand secondary education, especially lower secondary education. This is a matter of urgency amid the growing calls by the international community for universal basic education. As mentioned earlier, secondary education has attracted little attention in the face of the government's efforts to improve primary education during the 1990s. Now that primary education has been improved to a certain extent and the transition to a market economy has been expedited, Cambodia needs to expand secondary education and thus to develop middle-level capacity human resources with practical knowledge and skills as an important policy objective. Expanding secondary education with an emphasis on lower secondary education is high on the agenda for the education administration.

Specific targets for lower secondary education will be set out in the second round of EFA for 2010, which is being drafted based on a global agreement.

As discussed in section 2-2, there are no lower secondary schools in rural areas, mountainous regions, or remote areas along the national borders in Cambodia. In fact, some provinces that administer these poor areas just have few lower secondary schools in total. Under these circumstances, Cambodia needs to implement a wide range of measures to rectify these regional disparities if it wants to achieve universal lower secondary education. Among such measures are setting up a lower secondary education section in existing primary schools, establishing branch schools, constructing new additional

school buildings on the premises of the existing lower secondary schools, and opening new lower secondary schools.⁵ Without strenuous efforts to deliver lower secondary education to every corner of the country, it is difficult to form a basis for developing middle-level capacity human resources with practical skills.

3-2 Consolidation and reform of higher educational institutions and vocational and technical training institutions

Both higher education and vocational and technical training in Cambodia have been rehabilitated since the fall of the Pol Pot regime, thanks to international development assistance in terms of both human and financial resources. During the 1980s, Cambodia developed its educational system and curriculums with the assistance of the Soviet bloc. From 1990 onward, Cambodia developed another educational system and set of curriculums. The two systems, substantially different from each other, especially in the higher education sector, are still in place without modification. This presents an enormous obstacle to the development of human resources that can meet the needs of a market economy.

A number of measures are now being taken to rectify the situation. The National Higher Education Task Force is drafting a higher education policy. The national vocational training committee is drafting a master plan on vocational education. Colleges and universities and vocational training institutions, for their part, are taking measures to adjust themselves to fully meet social needs.

Successful examples of such measures are seen at the Royal University of Phnom Penh. Graduates of the newly established Department of Computer Science are assured of a job in the private sector, unlike graduates from other departments. The Foreign Language Institute has opened its doors to the working population, offering English language courses for businesspersons. This helps the university to improve its financial position.

Another successful example is the consolidation of vocational training institutions. Cambodia consolidated vocational training institutions under the jurisdiction of the MoEYS to create a national vocational training center in Phnom Penh. Based on this center, Cambodia es-

⁵ Wakabayashi(1998)

established seven regional vocational training centers across the country with a view to improving the quality of training and creating and improving the network of these centers. As a result, 70% of the graduates of these centers can now secure a job.

In addition, an increasing number of private vocational institutions, including foreign language schools and computer schools in cities, offer training for the working population and students who want to secure a better job. Apart from English language schools, Japanese language schools are also popular.

Demand is expected to rise not only for people with language and computer skills but also for those with highly specialized knowledge in business management and information technology (IT). Educational institutions need to make arrangements, including training instructors in these fields, to meet these growing needs.

3-3 Industrial development and human resources development

Although a decade has past since Cambodia converted to a market economy, a full-fledged human resources management system to bridge the gap between the human resources available and industrial development is not in place yet, nor is industrial education. Vocational and skills training may be part of industrial education, but it falls short of full-fledged industrial education where in-house training and industry-wide human resources development are the norm.

It is certainly necessary for public education to try to develop human resources that meet the needs of industry. Yet it is also necessary for industrial education to adjust itself to the framework of public education and promote human resources development within industry. Specifically, businesses or industries are required to set up technical training institutions. The Cambodian government, for its part, is required to authorize these institutions to grant an upper secondary school diploma or a college diploma. Such efforts to improve industrial education are particularly important in Cambodia's potentially competitive sectors. Among such sectors are tourism, agriculture, food processing, cultivation and processing of freshwater fish, cement and ceramics, furniture and wood processing, and precious metal processing.

4. Direction of Japan's assistance

In basic education, Japan is required to assist Cambodia in taking the following actions:

- (i) To redress the gender gap and regional disparities in primary education
- (ii) To significantly reduce the repetition and dropout rates
- (iii) To universalize lower secondary education as part of the initiative to improve access to secondary education overall
- (iv) To promote education aimed at building up practical knowledge and skills, as exemplified by foreign language education and science and mathematics education
- (v) To improve in both quality and quantity the educational infrastructure, including classrooms, facilities and equipment, curriculums, textbooks, etc. The same is required for educational personnel, such as teachers, principals, school inspectors, education administrators, etc.
- (vi) To put into place a system of local education administration that allows for the development of human resources that meet the socioeconomic needs in the region in question; to promote decentralization in this sector

Japan needs to pay particular attention to areas where the enrollment rate is low. Such areas have a number of problems. For example, there is an insufficient number of complete schools within the range of access to pupils, although there are many "incomplete" schools. To make matters worse, it is difficult to send a sufficient number of teachers to these areas to meet the local demand. To solve these problems, Japan can assist Cambodia in constructing schools within the accessible range of pupils and introducing combined classes in sparsely populated areas as necessary.

In building schools, the priority has traditionally been given to political considerations and manageability rather than accessibility. For example, the local education administrations tended to build schools near temples for easy management even though the children had to travel a longer distance to go to school. Now that the MoEYS has completed school mapping, Cambodia needs to conduct micro planning based on the results of such mapping to deliver education services that meet the needs of the local community. In particular, Cambodia is required to ensure that local education administrations

build schools and allocate educational resources—funds, teachers, facilities, teaching materials, promotion opportunities, opportunities to attend seminars, etc.—in line with the local needs, together with the participation of teachers, principals, and local residents. Through these activities, Cambodia can build up the capacity of the local educational administration and raise the sense of participation on the part of the local community. Japan can assist Cambodia in these fields.

Japan is now extending grant aid for grassroots projects for school construction. In the future, Japan is expected to extend this aid in such a manner that the educational management capacity at the local level will be enhanced and community participation will be promoted.

Japan's assistance to secondary education in Cambodia has to address, above all, the extremely low enrollment rates—about 30% for lower secondary schools and around 7% for upper secondary schools. These rates must be raised to the ASEAN standards.

To this end, access to lower secondary education needs to be improved through a variety of measures for the delivery of lower secondary education services, including setting up lower secondary education sections in existing primary schools, establishing branch schools, constructing new school buildings on the premises of the existing schools, and opening new schools, as well as offering secondary education services in the non-formal sector, as emphasized in the previous subsection. Cambodia needs to treat lower secondary schools as institutions to train middle-level capacity human resources that can cope with a changing society on a major scale, not as educational institutions for the elite or as a stepping-stone to universities, which are small in number.

For this to be achieved, secondary education in Cambodia needs to avoid creating forms of cramming schools designed just to enable students to pass the entrance examination to a higher educational institution. In addition, secondary education needs to aim for education that both meets socioeconomic needs and serves the needs of everyday life within the framework of educational reform in Cambodia.

To achieve these objectives, a number of measures aimed at universalizing secondary education need to be taken, including:

- Developing practical curriculums that emphasize hands-on experience in secondary education,
- Developing textbooks and guidebooks in line with

such curriculums,

- Building a secondary education system that can cope with the needs of students and their parents,
- Conducting pre-service training for would-be teachers and retraining for teachers that are actively involved, and
- Training local educational administrators and school principals and managers.

Japan can assist Cambodia in taking these measures.

Japan is now conducting an improvement program for science and mathematics education at the secondary education level. This program is part of Japan's assistance for educational reform aimed at bridging the gap between curriculums for secondary education and socioeconomic needs. In the future, Japan is expected to boost its assistance for secondary education development along these lines.

Reform of higher education in Cambodia will certainly be placed on the agenda in the near future. At issue is how it fits within Cambodia's education system and, especially, in relation to the reform of secondary education. This is because the reform of higher education should be carried out in line with the objectives of secondary education, among others.

In relation to school education, the role of universities as teacher training institutions should be reviewed. The existing teacher training institutions for basic education, the 17 Provincial Teacher Training Centers for primary school teachers and six Regional Teacher Training Centers for lower secondary school teachers, have many problems. These problems concern, for example, curriculums, teachers, educational facilities and equipment, teacher qualifying examinations, and recruiting systems, as discussed above. Above all, facilities, equipment and teaching materials for science and mathematics education are in short supply at these institutions. Therefore, the 23 teacher training institutions should be upgraded to higher educational institutions through consolidation with universities or as individual teacher-training universities and colleges. This action will contribute to the decentralization of higher educational institutions. This in turn will significantly promote human resources development at the local level.

As described above, Japan is expected to assist Cambodia's education development in a wide range of subsectors. These subsectors are set out in Table 5-10. The assistance objectives shown in the table can be reduced to two ultimate objectives: to universalize basic

Table 5-10 Important Subsectors for Development Assistance, and Assistance Objectives and Tools in the Education Sector in Cambodia

Important subsectors in education development	Assistance objectives	Tools or channels for development assistance
Primary education 1) School construction 2) Multi-grade classes 3) Non-formal education 4) Training local education administrators and principals	Universal primary education Guaranteeing school access Improvement in education service delivery Helping dropouts and the illiterate Building up the capacity of local primary education administrations	ODA, Grassroots grant aid, NGOs ODA, Grassroots grant aid, NGOs Grassroots grant aid, NGOs ODA
Lower secondary education 1) Construction and extension of schools 2) Non-formal education 3) Improvement in training teachers 4) Improvement in teaching methods for science and mathematics 5) Improvement in curricula for science and mathematics 6) Career guidance	Universal lower secondary education Improving school access Improvement in education service delivery Maintaining the quality and quantity of teachers (especially in science and mathematics) Providing knowledge and skills related to vocations and daily life Reviewing and optimizing the education system for science and mathematics Educational support and career guidance	ODA, Grassroots grant aid, NGOs Grassroots grant aid, NGOs ODA, Grassroots grant aid, NGOs ODA, Grassroots grant aid, NGOs ODA ODA
Upper secondary education 1) Construction and extension of schools 2) Construction of vocational schools 3) Improvement in teaching methods for science and mathematics 4) Improvement in curriculums for science and mathematics 5) Career guidance	Expanding secondary education and development middle-level capacity human resources Improving school access Enlarging opportunities for vocational education; support for job hunting Upgrading knowledge and skills related to vocations and daily life Adjusting science and mathematics education to society Educational support and career guidance	ODA, Grassroots grant aid, NGOs ODA ODA, NGOs ODA ODA
Higher education 1) Reform of teacher training institutions/centers Reform of PTTCs Reform of RTTCs Reform of Faculty of Pedagogy 2) Reform of teacher training courses at Phnom Penh University 3) National science and mathematics research center	Reforming teacher training; improving the quality of education Consolidating and reforming training institutions for primary and secondary teachers Upgrading training institutions for primary teachers to universities or colleges Upgrading training institutions for lower secondary teachers to universities or colleges Upgrading the training institution for upper secondary teachers to a university or graduate school Conducting teacher qualifying exams; issuing teacher's licenses Systemizing science and mathematics education; training teachers in science and mathematics	ODA ODA ODA ODA ODA ODA
Interdisciplinary programs 1) School health and health education 2) Literacy education; education for women 3) Industrial education; cooperation in education between the government and the private sector 4) Human resources development in politics and administration 5) Environmental education 6) Education for local patriotism; history education 7) Education for the vulnerable and the disabled 8) Pre-school education	Problem-solving through education Propagating public health and physical education Closing regional and gender gaps Developing practical and industrial human resources Developing administrative personnel with highly specialized skills Environmental conservation; learning about local nature Home districts; culture and identity Equal opportunity for education services; support for the vulnerable Raising the educational awareness of parents; early childhood education	Grassroots grant aid, NGOs ODA, Grassroots grant aid, NGOs ODA, Grassroots grant aid, NGOs ODA, Grassroots grant aid, NGOs Grassroots grant aid, NGOs Grassroots grant aid, NGOs Grassroots grant aid, NGOs ODA, Grassroots grant aid, NGOs

Source: Prepared by the author

education based on the principle of “Education for All,” and to develop human resources that meet socioeconomic needs as the country converts to a market economy.

The main tool for Japan’s assistance to Cambodia is official development assistance (ODA). Among other effective tools may be assistance programs through NGOs and grant aid for grassroots projects, which allows for cooperation with NGOs in the recipient country. Furthermore, Japan needs to explore the possibility of south-south cooperation and tripartite cooperation. What matters most, however, is to practice efficient development assistance aimed at achieving these two ultimate objectives while fitting such assistance projects appropriately within the education development plan of the Cambodian government, setting priorities, and maintaining close coordination with the assistance plans of other donors.

Coordination among donors and their assistance projects is crucial. Since there is often duplication among projects in such subsectors as textbook development, curriculum development, and teacher training, such projects are required to ensure continuity and consistency. In fact, Cambodia, concerned about the lack of such coordination, has reviewed the conventional aid approaches. Based on this review, Cambodia is now looking to introduce a sector-wide approach for consistent development management in the education sector as a whole.

Japan, for its part, is required to urgently study how the country can be involved in the sector-wide approach and how it will maintain mutual cooperation and exercise leadership as necessary within the donor community.

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