



KROUSAR THMEY - NEW FAMILY
First foundation assisting deprived children

Krousar Thmey
គ្រួសារថ្មី

Braille Workshop

Annual Report

- 2007 -

Report written by:

Paul Ziadé

Visit our website: www.krousar-thmey.org

Cambodia: 4 Street 257 - Kampuchea Krom - Phnom Penh
Tel.: (855-23) 366-184 - Fax: (855-23) 882-113 - e-mail: communication@krousar-thmey.org

Krousar Thmey is recognised as a charity in France, Switzerland and the United Kingdom

Krousar Thmey's Blind's Workshop

a. Presentation

1. From 1994 to 2007

As said above, back in 1994, absolutely nothing existed to provide blind children an education. Krousar Thmey was innovating already, but decided to push forward the efforts in order to comply the education that children would receive with the national education of “normal” children setup by the Ministry of education. Indeed, that was and still is, the best way to give handicapped children as much chances as possible to enter the professional world with the same State recognized diploma that others get.

The setup of the Braille Workshops was inevitable in order to reach the objectives set above.

First step first, the director of the Chbar Ampov, Mrs Phalla, and all her staff started to build up the Khmer Braille language, as it didn't exist at all. Taking inspiration of the Thai Braille language to start with, it's been now near 15 years of hard and continuous work that gave birth to a bright new language. Of course, even though the basics are now all existing, a huge amount of signs are still in progress in order to translate more and more complicate words (as students grow up and follow upper grade classes), such as chemistry ones, physics and so on.

It was also in 1994 that Krousar Thmey set up the workshops that would have for mission to translate and print into Braille all the regular books used in public schools. Every year since it started, the Workshop have had to update the books according to the national education ones, and to translate (+printing) the new necessary ones for the students passing in superior grade.

For information, one regular book is demanding approximately 5 times more paper to be correctly translated and printed into Braille.

Nowadays, the workshops, originally divided in three different parts, in three different schools, have been merged in order to centralize work and increase work efficiency. Before that, meetings were organized once a week, today, we can consider that the permanent exchange between each worker is far more efficient. Furthermore, the coordination is also easier thanks to the merging of all workshops.

2. *Staff*

Since it started, the workshop's staff has increased and is now composed of 5 permanent workers and one free worker, a blind student, helping during his free time.

Miss Visna Savath:

She is the only woman in the workshop and has been working there for about twelve years. Before working for Krousar Thmey she was trained on computers by another NGO. This other NGO is specialized in the training and social reintegration of handicapped people and it contacted Krousar Thmey seeking for a job opening for her. Krousar Thmey took her in as a staff. She initially attended a three month training course at Krousar Thmey's main office where the Braille bookmaking workshop was then located. The course she attended was led by Tim Hoon, her colleague today in the workshop. Every year, during summer, she undergoes further training to keep up with the development of the Braille standard within Krousar Thmey's organization.

She lives with her father in Phnom Penh. According to her, it takes three months to clearly understand Braille and 6 months to become fluent.

Her duty is to translate national textbooks into Braille using a computer that types Braille signs. She really enjoys working for Krousar Thmey, and so do we!

Mr Mol Bunham

He comes from Site II refugee camp near the Thai border. He is married and has two children.

In 1985, when he was a military soldier, he was shot in the eye and subsequently became blind. He then needed a wheelchair to get around because of another accident that occurred during his military career. From the time he became handicapped, he joined a NGO which trained him in understanding and translating Braille as well as in Braille book editing. He stayed in this organization for five years. In 1991, he was in Site II camp and was sent by Krousar Thmey to the Takhmao Center where he taught all regular national subjects in Braille to two blind students. He pursued this work for two years and in 1994 joined the Chbar Ampov School for the Blind which had just opened. There, he became a teacher for blind children working almost 9 years with level 1 and 2. Then he decided to leave teaching and began working in the Braille bookmaking workshop where he fits in very well.

His job is to copyedit Braille textbooks. He can easily locate the mistakes as he is blind himself.

Mr Tim Hoon

He has been working for Krousar Thmey since 1994. Like Visna, he was trained within Krousar Thmey and worked two years at the Head office. When the workshop moved to the blind children school of Chbar Ampov, he followed it. Before working for Krousar Thmey, he was a social worker in villages in various provinces.

He became handicapped 9 years ago after walking on a landmine and losing part of his left leg. Following this accident, he joined a NGO specialized in the social reintegration of handicapped people. There, through the provided courses he followed, he developed his computer skills.

He really enjoys working for Krousar Thmey and he is also aware of the fact that it is very difficult for a disabled person to find a job. His motivation to help blind children is strong and unbending.

Mr Sophan Nieng:

Sophan joined Krousar Thmey in Battambang Braille workshop two and a half years ago. When he was in high school, he decided to be a teacher. He first wanted to be an English teacher, but because of his mathematic skills, he became a mathematic teacher in secondary school. It is at University that he heard of Krousar Thmey for the first time. His friends told him about the organization, and he decided to apply as soon as Krousar Thmey would need someone. Once he joined the organization, he went for several trainings (and will continue to) so he could be in charge of electronic maintenance. Happy to be part of Krousar thmey because he is still in touch with students, he is now very useful as machines quickly get broken.

Our latest recruitment:

Mr LY Khemara:

In Charge of translating mathematic books, he joined Krousar Thmey in April 2005. His motivation was so intense that he had integrated the basics of the Braille language in a few weeks! Today, the Workshop could not go along without him, considering his deep technical competences as well as his knowledge in IT.

The Workshop Team:



Mr Tim Hoon

Mr Sophan Ngieng

Mr Ly Khemara

Mr Mol Bunham

Visna Savath:

3. Material, equipment and work procedure

i. Since we started

Of course, as said before, Krousar Thmey started from nothing. Since then, thanks to material and financial donations, we developed enough to provide sufficient pedagogic tools to children and got enough equipment in order to edit the needed books.

It is quite impressive to see the evolution of the material through years. When the workshop started in 1994, the only way to print in Braille was to use a machine, very similar to our old typing machine. Only composed of 6 typing keys, this machine had a lot of inconvenient compared to the new ones we will discuss right after. For instance, the major drawback was that only a fluent Braille person could use it. Indeed, combinations of the 6 keys would emboss the paper in the sought way and give the panel of Braille alphabet. Fastidious and demanding a very well trained or fluent person, this machine would, as the old typing machine, not allowed a mistake, almost impossible to eradicate from the final paper. In brief, it was time consuming and requiring great and constant concentration.

Thanks to technology and increasing finances, this hard work had quickly been replaced with a new software, allowing typing a text in Khmer or English on a PC and automatically translating it into Khmer Braille. This Software has been a real time gain for all the staff and also as it speeded up the book production (by cutting the necessary time to translate). Added to this software, were Braille printing machines introduced in the workshop. Thanks to those, printing became first of all quicker, but also induced a reduction of cost, the machine being able to emboss both side of the expensive Braille paper by moving of half a notch from one side to the other. However, we only have one PC equipped with this software, which means that only one worker takes advantage out of it... the rest still have to learn Braille in order to translate. Fortunately, the same staff has been working for a long time, so all of them know enough of Braille to translate the textbook. Furthermore, they still receive trainings once a year.

The Cycle of Braille books creation

1st: Translation

The first step in order to achieve the creation of scholar books is to translate them. In order to do so, as said before, the interpreters must be fluent in Khmer Braille. Thanks to Krousar Thmey and other NGOs, staff has been trained enough to do so.

The two interpreters in the workshop, namely Visna Savath and Tim Hoon, are in charge of both the typing and the translating of the school's textbooks.

Their yearly summer training course is organized by Krousar Thmey.

Printing timetable

2nd step: correction

Once translated, a draft is printed for copyediting purposes. This is the job of Mol Bunham. He also binds the books. But before, a fastidious work is done for checking any eventual mistakes. Once the book is totally translated in Braille in the computer, the person in charge of it prints one copy in Braille.

Then a team of two persons read through the book: the team is composed of one sighted person and one blind student. The student reads the Braille book out loud, and the sighted person follows on the printed book. Whenever the blind finds an error in the text, or if the sighted person notices that what he reads is different from what is written, they mark the error to be corrected later.

Three students used to work in the bookmaking workshop, but two of them are now teachers for blind in the association ABC (Association for Blind in Cambodia) and do not have any more time for this job. So the third student, Ben Visal, spends 2 hours per day reading through books.

When the team has finished reading through the book and has marked all the errors, the person in charge of editing the books corrects the errors and prints a new copy. The team of one sighted person and one blind child has to read through the book again. If they still find some errors, they do one more cycle of correcting – printing – reading.

3rd step: Printing

Once the draft is corrected, the printing process is launched. It takes a month to fully translate a textbook and the printing process takes 20 minutes.

The printing requires a specific kind of thick paper which has been bought in Vietnam for a long time, and now in Thailand, at a relatively expensive price. This special paper does not exist in Cambodia.

More than a hundred boxes, containing each a thousand unit of paper, are needed approximately to print the required textbooks each year.

Each page is printed on both sides to save paper. Such printing is made possible through the use of performing Braille printing machines explained above.

Every year since 1994 a new grade has been added, rendering necessary the translation and editing of the corresponding textbooks. Each year, moreover, as the notoriety of the school increases, the number of children increases thus necessitating the printing of new textbooks. This is particularly true with the first grade as the textbooks are older. A textbook lasts at least one year and at most 3 years. The final task per year is therefore to renew the old books, or update them if national education changed something in theirs.

Finally, thanks to technology, it was possible to print as much textbooks as needed by children.

Braille printing machine



Since the workshop has been created, a lot of new materials were provided or donated. In order to estimate the lasting or the state of the equipment, please note that A, B, C, D in the next table refer respectively to Good, Medium, to be Repaired, and Broken state like.

Material in the workshop and inside Chbar Ampov School:

ITEM	TOTAL	Date of Reception	State			
			A	B	C	D
Paper cutter	1	1996				1
Paper holder	1	1997			1	
Monitor	2	1998 & 1999				2
CPU	2					2
UPS	2					2
Book Maker (Braille printer)	1				1	
Juliet (Braille Printer)	1					1
Canon Bjc 1000	1				1	
Fans	2	2000				2
Monitor	4				1	3
CPU	4				1	3
UPS	3				1	2
Speaker	1					1
Book Maker (Braille printer)	1	2001		1		
Braille Express (Braille printer)	1	2003			1	
Copy machine	1			1		
Monitor	13	2005	9	3		1
CPU	13			11	1	1
UPS	7		1	4	2	
Speaker	11			8	1	2
Microphone	1				1	
Braille Express (Braille printer)	1		1			
Auto Voltage	1		1			
Flash MX 2004 Script	1			1		
Flash MX 2004 Bible	1			1		
PC Tables	12		12			
Canon 265SP	1	2006				1
Paper holder	1			1		
Perkins Braille machine	6			5	1	
Auto Voltage	1	Unknown		1		
Thermoform	1				1	
Big Tables	6		1	5		
Small Tables	2			2		
Chest of drawer	2			2		
Chairs	6				3	3
PC Chairs	10		5	5		
Fans	2			1	1	
Eng-Khmer Dictionary	1			1		

ii. 2007 focus

The process of creation remains the same, translation, correction and printing. All students have their own personal books and are asked not to carry them home in order to avoid spoiling or loosing them. Even though they take good care of their belongings, as said above, the average life of a Braille book is not very extensive...

Below is the table of the current equipment:

ITEM	TOTAL	Date of Reception	State			
			A	B	C	D
Monitor	2	2007		1		1
CPU	2			1		1
Auto voltage	1		1			
Headphones	10				2	8
Printer	1			1		
Scanner	1			1		
CD player	2			2		
Earphone	2			2		
Paper cutter	1			1		

b. Realized work

1. since we started

As soon as the workshop started its work, it organized itself simply and logically. Because we had lots of children without any education, the priority was to create 1st grade books. Then, following the children growth and the new arrival of others every year, the 2nd grade's books were edited and so on... here is a little recap:

In 1995, all books from grade 1 and 2 were translated and available for the young students.

Three years later, in 1998, books from grade 1 to 5 were all available. And so it continued to progress, needing approximately 1 year per grades to fully go around "the cycle of Braille book creation" (translation, correction, and printing); from grade 1 to 7 in 2000, from 1 to 8 in 2001

(plus the renewal of grade 1 to 7) up to 2004, year of accomplishment... All the books, today, from grade 1 to 12, are available!

The following tables provide details of the overall book production of year 2003 and 2004.

2003 production:

<i>Book type</i>	<i>grade</i>	<i>number of books edited</i>	<i>total by type of book</i>
Khmer	1	30	177
	2	50	
	3	12	
	5	10	
	8	30	
	9	30	
	10	15	
Mathematics	1	20	83
	2	30	
	3	5	
	8	5	
	9	15	
	10	8	
Chemistry	8	5	17
	9	4	
	10	8	
Physics	8	5	25
	9	4	
	10	16	
Biology	8	10	29
	9	11	
	10	8	
Moral	8	10	25
	9	12	
	10	3	
Geography	8	10	20
	9	7	
	10	3	
Housework	8	5	8
	9	0	
	10	3	
Geophysics	8	5	12
	9	4	
	10	3	

History	8	5	17
	9	9	
	10	3	
Science	1	5	46
	2	31	
	3	10	
Social	1	5	66
	2	51	
	3	10	
TOTAL			579

2004 production:

Book Types (Subjects stories)	Grades	Number of printed books	Total number of books
Khmer	1	10	265
	2	37	
	3	78	
	4	70	
	6	12	
	7	7	
	8	8	
	10	40	
	11	8	
Mathematics	1	10	134
	2	9	
	3	37	
	4	38	
	5	4	
	7	7	
	8	8	
	10	27	
	11	3	
Chemistry	7	4	28
	10	24	
Biology	7	5	24
	10	16	
	11	3	
	7	5	
Physics	9	1	25
	10	16	
	11	3	
Sciences	2	38	64
	3	26	
	4	-	

	10	-	
Social	1	10	75
	2	9	
	3	31	
	4	22	
	6	3	
Ethics	7	1	41
	8	3	
	9	5	
	10	21	
	11	3	
Home Economics	7	2	29
	9	19	
	10	5	
	11	3	
Geophysics	7	2	15
	10	13	
Geography	7	4	25
	9	8	
	10	13	
History	7	1	14
	10	13	
	11	-	
	12	-	
Khmer Folk Tales		5	5
English Folk Tales		9	9
Bird in the cage (tale)		10	10
Quiz (9)		1	1
Family festival Quiz		10	10
English lessons		3409 sheets	3409 sheets
Total	774 books and 3409 sheets		

The last table is a non detailed year production of the two last years

	Year 2005	Year 2006
Printed books	740 books	865 books

2. 2007 focus

2007 production is as following:

Grade	Subject	Quantity	Equivalent volume in Braille	Paper used
1	Maths	27	27	2260
	Social	52	52	3848
	Science	51	51	3876
	Khmer	26	26	2652
2	Maths	50	50	6656
	Social	69	138	11316
	Science	52	52	5616
	Khmer	52	52	5304
3	Maths	36	36	4032
	Social	55	110	9020
	Science	54	54	6804
	Khmer	56	168	15660
4	Maths	14	28	2112
	Social	14	28	2408
	Science	14	14	1680
	Khmer	14	56	5712
5	Maths	15	45	4050
	Social	15	30	2820
	Science	15	20	2120
6	Maths	30	90	9090
	Social	28	84	10416
	Science	27	54	6360
	Khmer	20	80	8400
TOTAL		786	1345	132212

Grade	Subject	Quantity	Equivalent volumes in Braille	Paper used
7	Maths	6	30	3160
	Science of Earth	6	12	876
	Moral	6	12	1320
	Khmer	6	42	4146
	Chemistry	6	6	654
	Physics	6	12	1200
	Geography	6	12	1344
	History	6	12	875
	Biology	6	6	756
9	Book 1	6	6	764
	Book 2	6	6	504
	Book 3	10	30	3080
	Book 4	10	30	3030
	Book 5	10	30	3110
	Book 6	10	30	3120
12	Math	7	35	4162
	Science of Earth	7	21	2058
	Home Education	7	21	2486
	Khmer	7	35	3950
	Physics	7	28	2541
	Chemistry	7	28	3294
	Biology	7	21	2394
	Geography	7	21	2427
	History	7	14	1596
	hydrocivic education	7	28	2464
TOTAL			528	55311

It is important to keep in mind that the workshop also produces the books for the “integrated classes” all over the Kingdom. In facts, the Braille workshop is the only one in Cambodia... Krousar Thmey’s objective is, of course, at term, to see the government take care of such an important duty. But this looks like it will be time demanding...

3. Beneficiaries' satisfaction and testimonies.

Since Krousar Thmey started its program, blind children have had access to education. It is not hard to see how much the beneficiaries have evolved. Their eagerness to learn more and more is “obviously obvious”. The two stories below were picked without any specific criteria, meaning that they should be representative of any of “Krousar Thmey’s children” pleased and proud to receive education adapted to them.

Hy Thearith, blind, grade 12:



His name is Hy Thearith. He is 22 years old and is totally blind. He is the second child of the family. He has 5 brothers and sisters but none of them is visually impaired.

He started school when one opened at the end of 1996. Now he is in grade 12. It is the last year of high school in Cambodia and Thearith will go for the national exam in July 2008.

Before starting school, he was considered useless in the family and the neighbors used to discriminate him. He was very dependent to his brothers when he wanted to move outside the house. He was also taught that he was hopeless.

But lots of things have changed during the last 12 years. He is now quite independent and becomes a new man thanks to education. He can do everything by himself, such as going everywhere without a guide or any assistance. He affirms that he is now recognized by society. His parents are also very enthusiastic with him. During his free time, he likes reading books especially text books from school. At the moment he does not want to waste his time reading anything else.

As it is the last year of his study, he has to prepare a lot and study hard. Some subjects are still difficult, especially Chemistry. He likes the Mathematics even though it is hard. The easiest subject for him is Khmer Literature. Despite those difficulties, he forces himself to do lots of exercises. He will succeed the up coming exam.

He has heard about his friends in Phnom Penh who have passed the exam and went to university. He has not got a precise idea of what he wants to do after having passed the national exam. But his wish is to become a teacher for blind children because he wants to educate the young generation.

Chantha, low vision, grade 6:



Chantha.

I am Chantha and now I am 16 years old. I am a low-vision person and I enrolled this year in grade 6. I began school last year in grade 1. Because I used to study at public school until grade 5, my teacher assigned me to grade 6 immediately.

I had heard about the school many years ago but my mother said that I was too young to live outside the house and out of her sight. As my eyes were getting worse every day, my mother used to bring me several times to hospital in order to heal them, but nothing changed. Last year, a man called Phall who gives eyes assessment to villager, brought me to the school for blind in Battambang.

Today my vision is not good. I have to use optical device such as lenses. But I still can write as fast as before. I am learning now to use Braille code and read it also. When I will write fast in Braille I will use it much more than normal written character.

Here I also study other subjects. I like computer lesson but as I don't know at all English I can not use a computer for the time being. However, this first year I can at least use the basic Word program.

I really enjoy being boarder, I love my classmates here. They are very kind and friendly. I have not only blind friends but also deaf ones. I can communicate a little bit with them now.

c. Projects and Needs

The Workshop, although working properly, still encounters important difficulties. Now that some students go to university, staff must work hard to translate always more complicated books. Moreover, the books are very specific and will be edited especially according to the students' choices of studies. Today, two blind students are attending University in two different fields, which means that a lot of effort and work from the staff is directed to the benefit of only two students. The point here is that these University books might not serve any other students, unless they attend University and choose to study the same field than one of their predecessors. And finally, by the time the situation happens, University programs might have changed the textbooks... For the moment, there is no other way. With time it might naturally get better as the number of students attending University should increase.

As far as the Braille workshop is concerned, in order to gain more time, it would also be a good thing to have all computers equipped with efficient translating programs such as the current one (DBT 10.6).

Sopuan, now in charge of maintenance has some more training scheduled. He should be able to maintain or repair the defective or broken machines. It is impressive to see how quickly materials get damaged here, due to weather, humidity, dust and strong solicitation of course.

Concerning the equipment, the staff requires four UPS (without which work in progress is lost in case of electricity cut), one scanner and one PC to be dedicated to university students only.

Finally, one of the most important needs the workshop suffers of is the lacking of a specific program and the printing machine going with it, namely Tiger Program and Tiger Embosser. Nowadays, the workshop is unable to edit and print some important graphics, which are needed and getting more and more complexes with studies after 12th grade. This software is the most performing, and is specific for graphics design and printing. This software cost about 300 dollars, while the machine price is between 5.000\$ and 10.000\$ and therefore cannot be prioritized now. Hopefully, it will be donated to the organization one day or specifically financed by some donator.