

JICA ETHIOPIA

Activity Report

Vol 5

Kotaro Shinchi
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1. Coaching seminar

On October 2017, the 1st level swimming coaching seminar was held in AMU. The twenty trainees came from all of the SNNPR (Southern Nation Nationalities and People Region). The six trainees are from AMU (Arba Minch University) sports academy. They received the license after this training course.



The contents of this seminar were learning the four types of swimming style, diving and turning technique then confirming the competition rule and theory. I supported this seminar as a demonstrator and I helped the beginners for getting the basic swimming skill.

(1) Recognizing the responsibility of the license

I met Mr. Michael who is a respectful instructor. He is the president of Ethiopian Swimming Coach Federation. He got the coaching license in US. I was surprised with his splendid idea and mind in this seminar.



First, it is how to evaluate the swimming skill. He took a video of four types of trainee's swimming style. Then, the trainees evaluated their own swimming style at the final exam because a swimming coach must know what the correct swimming form is. The trainees could recognize their swimming form. In addition, they must be conscious of swimming coach's job.

Second, He did not give the license to all participants because some trainees could not improve the skills. They were able to get the basic swimming techniques but they could not achieve the competence of swimming coach in this time. I was proud of his decision because if people participates such a kind of this seminar, all participants can get the license without ability in Ethiopia. He knows the responsibility of the license.

Through this seminar, the lifesavers got the license and they were encouraged. After this seminar, they keep training themselves hardly and constantly then they increase the coaching experience day by day. Now, there are no swimmers around Arbaminch community area, but they will produce many swimmers in the future.



Congratulations.
The lifesavers got swimming coach license.

2. Swimming lesson for the university students

From November to December 2017, the sport science department students had swimming lessons. The lesson was organized securely by lifesavers and teachers. In addition, the students were satisfied with all lessons because of improving teacher's swimming skill and solving the facility problem of the pool.

(1) Improving the teaching skill

Mr. Aicho is a main coach in this lesson. He had already the breathing and floating technique and he had taught the students it perfectly since last season. Moreover, he practiced hard to master four types of swimming styles with me. Now he can do it. He has more confidence with his swimming skill in this season.



All students had no swimming experience before joining this lesson. At the beginning, they were afraid of the putting face in the water and some of them got into a panic. But the students were able to float and breath out in the water. In addition, they tried to swim the free style and breaststroke.

(2) Improving the swimming pool facilities

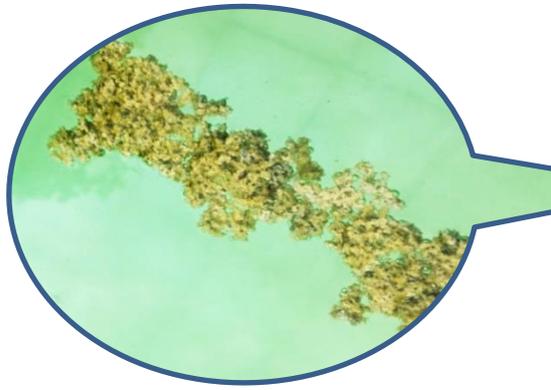


The lesson was held constantly since the facility problems were solved such as water pumping system and the shower tank built. Arba Minch University swimming pool needs many supports from the other departments because there is no circulation system. Now, many supporters help our swimming pool. We really appreciate it.

I would like to keep supporting the teachers to serve the developed lesson until the end of my assignment term. And also, I would like to make a good relationship with our supporters for making the sustainable swimming pool service.

3. Management of the water quality

From September to December, the swimming pool water was polluted seriously with alga bloom as below in the photos. We tried to remove and clean it but we could not clear it even though we changed the all of the water. On January 2018, we finally could solve this problem through water technology department help.



(1) Getting the exact advice from the professor



We visited the Dr. Kinfe to get some advice about polluted water. He is the professor of water technology department. He gave us some exact advice as below.

- To add the copper for killing the alga.
- To add the chlorine day by day for the chlorine level is included at least 0.3mg/l in the water.

① To control the copper securely

He particular explained about properties of copper because we should limit the amount of the copper for the human health. He said even drinking water is included a little copper. So if we add the correct amount of cooper in the pool, the water will be cleaned and human health will not get huge damage. The amount of calculation shows next page.

② To use chlorine more efficiently

After getting his advice, I run a review about the chemical calculation and disinfect of chlorine with microbes. In the next page table, most of microbes in the water will be sterilized by around 0.3mg/l chlorine level. It amount is 2kg to 3kg.

Before contacting the Doctor, we add the chlorine 5kg three times /week for keeping the water quality. And then, we add it 20kg when the water color become green.



According to this and amount of chemical calculation, we decided the three things as below.

- To add the copper sulfate 10kg at the maximum when the water is polluted severely only.
- To add the chlorine 3kg day by day to keep clear water.
- To analysis the pool water twice a month at the AMU laboratory.

Calculation of the proper amount Cooper Sulfate Pentahydrate

CaSO₄·5H₂O (Cooper Sulfate Pentahydrate)

Cu: 63.5g/mol

CaSO₄·5H₂O : 249.7g/mol

$$\frac{\text{Cu}}{\text{CaSO}_4 \cdot 5\text{H}_2\text{O}} = \frac{63.5}{249.7} \approx 0.25$$

Cu is included 25% in the CaSO₄·5H₂O

AMU swimming pool capacity = 2730m³

Recomending Cu % in drinking water = 1.0mg/l (Reference:WHO)

We can add Cu 2.73kg at the maxmum in case of AMU swimming pool capacity(2730m³),

Cu 2.73kg ÷ 0.25 = 10.92kg

Therefore, we can add the 10.92kg CaSO₄·5H₂O (Cooper Sulfate Pentahydrate) in AMU swimming poo

AMU swimming pool capacity=2730m³

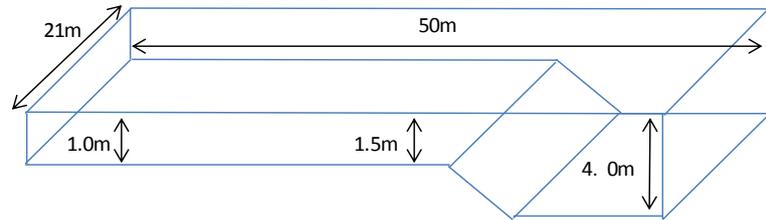
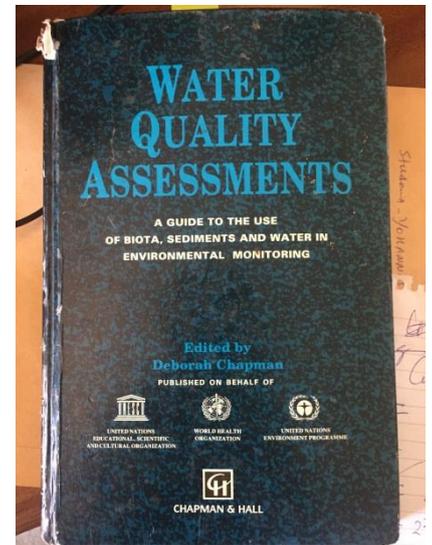


Table 3.4 Continued

Variable	Drinking water			
	WHO ¹	EC	Canada	USA
Cadmium (mg l ⁻¹)	0.005	0.005	0.005	0.01
Chromium (mg l ⁻¹)	0.05	0.005	0.05	0.05
Cobalt (mg l ⁻¹)				
Copper (mg l⁻¹)	1.0	0.1¹	1.0	1.0
Iron (mg l ⁻¹)	0.3	0.3	0.3	0.3
Lead (mg l ⁻¹)	0.05	0.05	0.05	0.05
Manganese (mg l ⁻¹)	0.1	0.05	0.05	0.05
Mercury (mg l ⁻¹)	0.001	0.001	0.001	0.002
Nickel (mg l ⁻¹)		0.05		



Disinfectant level of chlorin

Chlorin level		Microbe
0.10	ppm (mg/l)	typhoid bacillus, dysentery, cholera, staphylococcus
0.15	ppm (mg/l)	corynebacterium diphtheriae
0.20	ppm (mg/l)	pneumonia germ,
0.25	ppm (mg/l)	colon bacillus
0.41	ppm (mg/l)	adenovirus

Chemical amount formula

$$\text{Chlorine amount (g)} = \text{①chlorin level (ppm)} \times \text{②pool capacity(m}^3\text{)} \times \text{③chlorin coefficient} \times \text{④pool coefficient}$$

$$\text{Chemical dosage (g)} = \text{①0.3ppm} \times \text{②2730m}^3 \times \text{③1.43} \times \text{④1.5} = 1.756 \text{ (kg)}$$

$$\text{Chemical dosage (g)} = \text{①0.4ppm} \times \text{②2730m}^3 \times \text{③1.43} \times \text{④1.5} = 2.342 \text{ (kg)}$$

①criterion of chlorin level		②Pool capacity(m ³)		③chlorin coefficient		④coefficient	
Drinking water	0.1~0.4ppm	width	21m	Calcium Hypochlorite70%	1.43	Drinking water	1.1
Pool water	0.4~1.0ppm	length	50m	Calcium Hypochlorite65%	1.54	Pool water	1.5
Algae for killing	2.0ppm	depth(until35m)	1.5m			Algae for killing	1.8
		depth(until15m)	4m				
		Pool capacity	2730m ³				

4. SNNPR swimming team

Southern Nation Nationalities and People Region (SNNPR) swimming team has been trained in AMU since August 2017. The number of swimmers decreased half compared with the beginning time. The main reasons are lack of coaching skill and supporting mental health care of the swimmers. I tried to do some actions for solving these problems. Fortunately, their swimming skill and ability are greatly improved. In addition, they got confidence their results in south swim competition on December.

(1) Making the training schedule

I made a training schedule and shared it with the coaches. The coaches understood and agreed with the broad outline of the training schedule. As the result, the swimmers got basic strength as a competitor by the long distance training. The male team achieved to swim over 7000m, female team also achieved to swim around 5000m at once. Moreover, they mastered the four types of swimming style until December.

Traning term : Aug 2017 to Mar 2018								
Trainig period	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
	1st period Forming	2nd period Distance			3rd period Speed & Time	Recovery	Trans fer	Competit ion
Days	45days	90days			30days	7days	5days	1st/March in Makele
AM Train	Swim	Gim (physical exercise)			Stretching Swim(technique)	Swim(1h)	Move to Makele	
Distance/time	3000~5000m	7000m	10000m	10000m	2000~5000m	Swim(2h))		
Distance/day						4000m		
Focus of training	Forming	Kick(A)	Kick(B)	Swim	Swim	Technique & Forming		
Purpose of training	To get four typ of swimming style	Quantity			Similarity competition	Recovery		
Reference of swimming menu	W-up 1500m(30min) Main Menu Swim 1000m(2typchoice 500/800/400 600/300/400 200/200/100 Speed 400/200/100/50 Downm200 <u>Total 5200m(1h30min)</u> <u>the same menu/week</u>	W-up 2000m(30min) kick 1000 × 4typss kick pull 1000(Batt) sidekick 1000 swim2000 down1000 <u>Total 11000m(3h)</u> <u>the same menu/week</u>		W-up 2000m(30min) swim 8000 down1500 <u>Total 11500m(3h)</u> <u>the same menu/15days</u>	W-up 1000m(15min) 1500 400 × 2 100 × 3 down 500 Total 4100m(2h30min) the same menu/30days	W-up 1000m swim 2000m <u>Total3000m (1h30m)</u> the same menu/week		

(2) Improving their stroke technique

The swimmers' catching technique and stroke forms are improved by hand paddle and finger paddle. Before introducing it, it was difficult for swimmers to find their bad stroke habits. Now, they corrected their zigzag swimming by themselves. Especially long distance swimmers and female got the efficient swimming technique little by little.

I made hand paddle and finger paddle by scrap bucket. It is needs to remake more strong at the rubber parts to use well. Now, the team has already got the ten formal hand paddles from the US. But I want them to know this mind if we want something we can make it by ourselves.





(3)Interval training

Currently, it is important to adopt the interval training for the swimming because when people swim, our breath times are limited. The respiratory function directly influences our swimming time.

First, I would like the swimmers to be interested in their time by each swim. Then, I accustom them to interval training naturally because the male team tried this before but most of swimmers could not do it.

I bought the clock in Addis Ababa showing the photo and the lifesavers made the clock stand with chair. Now, it is set up at the poolside during the training time.

(4)Marking the surface point

I set up the flags at the 7m line from the starting place to remind the surface point. The reason is the swimmers always lose the time both at the start and at the turn parts. Now, they take care of the surface point by flags easily. Then, the coaches also were able to give advice properly and correctly. I hope the swimmer's streamline (efficiently posture in the water) also will be improved by it.



I suggested and tried to cooperate with the coaches but we were not able to understand each other exactly. Especially they did not agree to make daily training menu. I always saw that the swimmers were bored with the training. Then, many of potential swimmers left this training. Of course I tried to teach as a main coach but I also could not give the satisfactory lesson for them because of a lack of my Amharic language knowledge.

By the way, we have one more month until the national competition. The coach and swimmer have to focus on the game. The swimmers must recognize their problem and improve their swimming technique by themselves because the swimmers exceed the coach's level and their swimming levels are already top level stream in Ethiopia. Fortunately, I can spend a long time with swimmers until the end of this training. I will make the good environment for improving the swimmers' technique.

5. Holding the football lesson at the AMU primary school

At the end of October, 2017, I held the football lesson for a week in AMU community school. I invited five Japanese football coaches. This event was targeted for around two hundred students between G3 and G6.

(1) Maintenance of the ground condition

Overgrown weeds

A lot of stones and Locks

Clean and secure



For holding the lesson securely, we maintained the court. First, I cut the overgrown weeds for a week then we picked up stones and locks with the students before giving the lesson.

(2) Touching the ball many times



There are 40 to 50 students each class. We asked their age and interest. We mainly arranged the lesson as a game. We divided the court with four parts and also divided the students for five groups. Among the four-group games, one group had the dribble and pass lesson with coach. They were very pleased to touch the ball many times, because when they have PE class in a school, they usually use one ball with forty students. Of course, everybody can not touch the ball many times in the class. And the ball is prepared by the teachers themselves.

Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon
Orientation	G6	G5	G4	G3	/	/	G6

(3) Supporting the lesson from the principal

Mr. Kebete is the principal of the primary school. He agreed with our project and cooperated with us very much such as information for the students, and coordinated the class timetable. Especially, we needed to hold the lesson before 8AM because of the strong sunshine. One day, the other subject teacher had already started class, he run to us and informed again. He said “ Children is our treasure and future.”

According to this football lesson, we gave the sport opportunity around two hundred children. And we were glad to see many smiles. I would like to support this school lesson for making the materials and how to supply sport equipment with teachers.





Exciting students before the lesson



Picking up stones and locks



Managing the court by themselves



Praising the excellence students with green card



Stretching the body with all



Learning the dribble technique



Trying the dribble



Enjoying the sport



E-Project

Making a chance to play football for grassroots

