Conquering Mount Kinabalu!

HIGHWAY AND TRANSPORTATION ENGINEERING TECHNICAL DIVISION





by Engr. Rishi Ganesh and Engr. Shuhairy Norhisham

IN preparation for the quest by IEM members to conquer Mount Kinabalu, the Highway and Transportation Engineering Technical Division (HTETD) organised a talk on this subject on May 4, 2012 at the Tan Sri Prof. Chin Fung Kee Auditorium, Wisma IEM.

The speaker, Mr. Roger Rozario, is an expert in sports science and physical fitness for the past 20 years. He has helped to establish a regional certification and education centre for health and fitness professionals in the Southeast Asia.



Mr. Roger getting ready for the presentation

Mr. Roger started off the talk with a brief introduction of Mount Kinabalu. It is the 20th most prominent mountain in the world with its height reaching 4,095 metres (13,435 ft) above sea level. In fact, Mount Kinabalu is the fifth highest mountain in the Southeast Asian region, which is preceded by Mount Hkakabo Razi, Myanmar (5,881m), Mount Puncak Jaya, Indonesia (5,030m), Mount Trikora, Indonesia (4,751m) and Mount Mandala, Indonesia (4,701m).

The route begins from the Kinabalu Park Headquarters. followed by two different trails of climb. The first trail is known as the Summit Trail, which starts at the Timpohon Gate. The second trail, which is known as the Mesilau Trail, which is also the more challenging trail compared to the Summit Trail due to its higher degree of elevation, with an additional climb distance of two kilometres. The meeting point of these two trails lies before Laban Rata, which is situated at an altitude of 3,262 metres. The journey from Kinabalu Park Headquarters to Laban Rata is estimated to take 4 to 6 hours.

The speaker also mentioned that the most difficult part of the climb begins after Laban Rata. Some hikers, even those who are physically fit, may start to experience symptoms of fatigue, nausea, loss of appetite, vomiting, and dehydration (usually after the height of 3,000 metres above sea level). Such condition is also known as Acute Mountain Sickness (AMS). As the elevation increases, the atmospheric pressure and the amount of oxygen will decrease, and may lead to respiratory difficulty among the hikers. The two most affected parts will be the lungs and the brain.

To prevent the sickness, the speaker recommended the hikers to consume carbohydrate-rich food and to drink plenty of fluids. The best method to prevent AMS is to allow some time for the body to acclimatise. Acclimatisation is a process where the body slowly adapts to higher altitudes. However, this method is not practical as it could easily take up a few days. Other than that, AMS can also be prevented through prescription drugs, which should only be taken with doctor's consent. The journey from Laban Rata to the peak is estimated to take another 4 to 6 hours.

Mr. Roger emphasised that the hikers should begin their special diet at least four days before the climb. He also mentioned that during the climb, the body will continuously need energy. Thus, the best food during the climb is food rich in potassium. For instance, banana is rich in potassium and may be conveniently taken during the breaks. However, hikers are recommended to consume only a quarter of a banana during each break.

Some hikers presume that chocolate is the best instant energy provider. Unfortunately, the energy level would drop as quickly during the hike. Thus, chocolates should be avoided. In terms of fluid, the speaker advised that only certain types of isotonic drinks in the market can be consumed during physical activities, including hiking. The isotonic drink is to be diluted with plain water in a ratio of 1:4. Any isotonic drink should not be consumed directly during the hike.

A pair of good hiking shoes is essential. However, hiking boots (which are usually made of leather) are not recommended, as it could be slightly heavy and there could be a little friction between the hikers' ankles and the boots, causing blisters. Hiking shoes are more flexible. The hikers should also wear thick socks for more comfort and to reduce friction between their feet and the shoes.

Any new hiking shoes should be worn a few times before any mountain climb, so that the new shoes will have a little break-in and the hikers will get used to their shoes

Other appropriate apparels to be considered for higher altitude climbs include waterproof winter jacket, a winter mask, three to four layers of T-shirts which can easily absorb sweat and dry up quickly (cotton-made clothes should be avoided as it can trap moisture and cause hypothermia), and gloves that can protect hands from the cold yet not slippery so that they can be used when gripping ropes. The backpack should have an ergonomic design for comfort and to enable loads to be carried evenly and close to the body without any pulling effect.



Mr. Roger receiving a token of appreciation from Engr. Shuhairy Norhisham, a committee member of HTETD

Last but not least, the speaker emphasised that the only way to be prepared physically and mentally for any mountain climbing is by hiking shorter trails with an increase in level of difficulty after every hike. At the end of the course, Mr. Roger Rozario received a token of appreciation from Engr. Shuhairy Norhisham, a committee member of The Highway and Transportation Engineering Technical Division (HTETD).