

ASEAN Women Engineers: Future and Prospect



by Ir. Assoc. Prof. Dr. Leong Wai Yie

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For the longest time, the engineering profession had been almost exclusively a white male domain. But the world has changed and continues to change; the engineering industry as well as the broader workforce reflects that.

There are quite a few organisations actively advocating for women in engineering, including the Society of Women Engineers (SWE) and the IEEE Women in Engineering professional organisation. These promote women in engineering and science as well as encourage young women around the world to consider careers in these fields.

In ASEAN, there is the Women Engineers - ASEAN Federation of Engineering Organisations (WE-AFEO). This year, the WE-AFEO meeting will be held in Penang. Two women engineers from the ASEAN community have been invited to pen down their views and comments on WE development and future and networking strategies for WE-AFEO.

One of them is Mrs. Men Nareth, the Represent President of WEC, Cambodia and Students Affairs Coordinator from Institute of Technology of Cambodia.

In the past, parents in Cambodia did not allow their daughters to study or work away from home. After the Civil War however, Cambodia faced the lack of male labourers. So, the women had to take over responsibilities that were commonly and principally done by men. Under Cambodian law, women are to receive "equal pay for equal work". In the 1990s, many "uneducated young women" from rural areas ventured into the city to work in garment factories.

In 2004, the organisation, Gender and Development for Cambodia, stated that 6% of the female workforce in Cambodia were paid and that 16% of Cambodian girls were enrolled in lower secondary schools in 2004. Women were also increasingly present in Cambodia's universities. In 2004, 20% of graduates from universities were female but the number of women engineers was lower compared to other fields. Perhaps Cambodian women think engineering was very difficult, and that they must work hard in the field when they leave school.

Since 1993 there had been a modest rise in Cambodian women's participation, including leadership, in non-governmental organisations, focusing on the issues and rights of women. It was reported in 2004 that 10% of National Assembly members, 8% of Commune Council members and 7% of judges were women. Therefore, the ASEAN network changed the mindset of young women to study abroad and get jobs, just like the men.

According to the Engineering University survey, the number of women engineers should increase every year. Through WE-AFEO, we hope to strengthen the capacity building of WEC members to get new technology by training and sharing their experiences with each sister country.



The 3rd WE-AFEO Meeting 2014 in Myanmar



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The other representative is Mrs. Khin Sandar Tun, the Joint General Secretary of Myanmar Engineering Society.

According to the Ministry of Foreign Affairs in Myanmar, there are 8 major national ethnic races in the country, comprising the different ethnic groups: Kachin, Kayar, Kayin, Chin, Mon, Burma, Rakhine and Shan. The country's population in 2014 was recorded at 51.4 million, with males at 24.8 million and females at nearly 27 million. This means females make up 51% of the population.

According to Myanmar's history, culture and laws, all its citizens have equal rights at all levels. Women have the same access as men to human resource endowments, rights and economic opportunities. The people believe that giving women equal opportunities will allow them to emerge as social and economic actors, influencing and shaping more inclusive policies.

Besides, improving the status of women also results in a greater investment in the children's education, health and overall well-being. The Myanmar Government also accepts that empowering women and the promotion of gender equality are key to achieving sustainable development. This is why there are many famous Myanmar women, not only in the country, but also in the world.

Technological universities in Myanmar have 19 academic engineering departments such as architecture, chemical, civil, electrical power, electronic, information technology, mechanical, mechatronics, metallurgy, mining, petroleum, textile, physics engineering, chemistry engineering and geology engineering. In all technological universities, females make up 75% of the total student population. From 2013 till

now, the ratio of female students in Yangon Technological University has increased by 50%.

In Myanmar, women as well as women engineers can occupy positions of leadership and decision-making. As Myanmar is a society in which there is gender equality at all levels, all women can be empowered, can fully realise their rights, are in position where they can effectively lead and are treated with dignity and respect.

According to the data, women engineers in Myanmar are equal to men engineers and they can participate in all sectors of the country's development. They can play a vital sector in building the nation into a peaceful, developed country. ■
