



Dr Pichmony Ek, Ph.D

Food Scientist, Lecturer and Researcher, Faculty of Chemical and Food Engineering

"My hometown is Battambang. I have always been interested in STEM because I like observing nature, and chemistry and physics are very relevant to the nature around us. When I was a child, I wondered: why the sunset, why the waves, why the tide, why the rain and why the rainbow?

In that time, ITC was very famous among STEM teachers, I talked to some seniors [former students in ITC] and it confirms my interest for ITC. I was lucky that my parents gave me the opportunity to push through my studies in PNH.

Today I am expert in food technology, beside teaching food processing and food quality insurance, I develop food products (mostly cereal based and fruit-based products) improving the food processing steps to reach better food quality and safety and hence improve the product shelf life and quality.

I work in food but not in the kitchen though!

I am also in charge of coordinating the 5 doctoral programs at ITC, thus, I also provide general guidance to doctoral students during their academic life. I always encourage women students to upgrade their qualification, but it is hard sometimes for them to focus on PHD. I support them by sharing my experience of how to cope with challenges, and how to build their confidence. Challenges happen to many of them, actually women have to face more challenges than men. **I often tell them: I could do it so you can do it too.** We can discuss together to identify when they need to talk to their supervisors and we explore sometimes a little bit the balance of their academic life and personal life.

In STEM, you see a lot of men, because young men are raised and expected to be more confident in studies, while women are told they will have family duties. As a consequence, women students feel more discouraged to advance their studies. I observe that women tend to think in detail, which can be good but sometimes if you think too much it hinders your action, it makes you afraid to move forward. I experienced it myself and observed it with the women students I support. This does not happen to men.

The fact that there are very few of us [women] when you look around, does not help when you lack confidence, if you don't see anyone like you in your environment, even if your parents say you can do it you don't feel you can.

Organizing a comfort space for women to talk and to share challenges in their career can help build their confidence. Women gathering is important but raising awareness of their male counterparts is important too. I am lucky to have a supportive husband who supports me in my career. It gradually came into my mindset that I needed someone open-minded like that. It was quite unconscious at first, but at the same time I thought that if I don't find someone with a similar mindset as me, he would not feel comfortable with me. But still, it is a risk, you cannot know everything in a relationship before entering into it and things can always change. That is why raising men's awareness is important too. My husband has been exposed to education abroad (he did his master abroad), he reads a lot which helps him to be open-minded. His father also influences him. He saw his father as a role model, and his father was very much respectful to his mother.

In 2008, not many parents allowed their daughter to be away from home to study, nowadays, more parents encourage women to push through education. Before, traditional culture was stronger, international exposure was less, role models were harder to identify. Safety and security were an issue. Parents would be afraid their daughter would not be safe: **far away from their family, women are more vulnerable.** Now the country is more developed so families are more confident.

Financial support was also a barrier, families could not spend a lot for their daughters. My parents could not really afford my studies. Still **my family members are education lovers since my grandfather, who was a professor before the Pol Pot regime, he valued education a lot, he used to say "Education will bring you further, not any asset can bring you as far as education".** It inspired me as I stayed with my grandfather, I performed well in my education so it motivated my parents to motivate me more for higher education.

Giving opportunities for women to push through education with STEM is very important. Push through STEM studies is very intensive and therefore not very "suitable for women". Civil engineer, electrical engineer, mechanical engineer is seen as more for men. Why? When you talk about engineering, people think only about civil engineering (building a house), when you refer to electrical or mechanical engineering you see machines. Globalization and digitalization give women now more information and exposure on the varieties of engineering jobs like environmental engineers, etc.

Still some parents would think of eating first and not think further. Hence the importance of raising awareness on the additional challenges of women who need to work: **our mindset is such as when we have family we think a lot about our family, some relatives would say: "You work a lot, you need to spend time with your family", then we feel guilty. It is not only the duty of the women to take care of the family but also the men's duty.**

STEM is not only for men, we need to build women's confidence through coaching with messages such as "you can do it", identifying more and more role models, through testimonials and videos. My parents gave me the opportunity to see the world so I felt more confident to push through my career in STEM.

The messages from the society are important, it has a lot of influence on women's confidence: if the society says "this work is for men", women feel less confident to enroll.

When you become an adult and you start your family, you have another duty as parents. There is more pressure on women to have kids and raise kids, therefore women sacrifice more, they have to stay back and look after their kids, that's why more childcare services in the factories, in workplaces would bring meaningful women support. **Having to find someone to look for your kids while you are working in factories is hard.** There should be more childcare support opportunities as STEM requires a lot of thinking, focus; family care prevents us from working, and working can prevent us from thinking of our families...

At the early stage of my career, I enjoyed an environment which made me feel more confident: I did not have family duty at that time, I was alone, not married, I could see a lot of successful women, I spent a lot of time abroad after my bachelor degree [traveling abroad to get higher degree is now not necessary anymore as Cambodia provides higher education too]. When I got married, I got responsibilities, and I felt more family duties.

Programs to build self-confidence would be great for students: interviews, videos, of women in the energy sector could contribute to motivate more women to join. Still the competition mindset will be challenging: I don't think talking about gender equality is sufficient, as I don't like being told that I got the job opportunity because I am the only woman applying. **Women's competency needs to be recognized. I did not get the job because I am a woman but because I am competent enough.**

Women need to recognize their abilities. Mental support can help make women safer and more confident that someone else can take care of their families so that they can be more focused on their work.

To succeed, gender equality policy is not enough, talking is not enough, actions are required. What I have experienced so far is a lot of talking about gender equality, equity, but in the workplace, I can see that it is not the same thing. Maybe it is my perception. At the workplace it feels like women cannot always seize the same opportunities as men. Some men talk about gender equality but at home they don't really change their behavior. Well, we cannot change overnight. In reality, there is still a lot of gender imbalance for women within their families.

Women in STEM have supportive families who believe in their capacities but still have a lot of pressure as women. You would always feel like you have other things to do such as raising children. I don't know how to make women think less like that.