

Ignite by **DATUK SERI DR KAMAL JIT SINGH**

Much food for thought

Malaysians must rise to the challenge to resolve many food security issues.



If I placed a plank of wood on the floor and offered you RM10,000 to walk across it, would you? I'd wager that most people would, since it would be as easy as taking candy from a baby.

What if I raised the plank to rest on two chairs, would you still try to walk across it? Again, most people probably would, since they could just jump to the floor if they lost their balance.

Let me make it harder now. If I put a giant plank between the Petronas Twin Towers and challenge you to walk across it, from one tower to the other for RM10,000, would you do it?

Let's kick it up another notch. Imagine that your daughter has been kidnapped and will only be released if you are willing to walk across a plank from Tower 1 to Tower 2.

Would you do it now? As you can probably guess, almost everyone I posed this thought experiment to said that they would definitely risk their own life to save their daughter.

This is a drastic example of motivation – having a strong reason to do something, which you otherwise would not do. Motivation is a key innovation driver. If you have a compelling reason to solve a particular challenge, your passion will drive it through.

Money is not the only motivator. A sense of accomplishment, recognition, justice or even just the desire to do good for others are better motivators. Money is only a by-product that emerges when innovation succeeds.

Hunger is another strong motivator for

innovation. Steve Jobs is often quoted for insisting: "Stay hungry, stay foolish". However, hunger in the literal and physical sense has been the driving motivation for a number of groundbreaking innovations. Perhaps, this is something Jobs did not have the misfortune to experience.

It is a known fact that global warming has disrupted agricultural patterns, destroying crops and causing people to go hungry.

Several innovative companies have developed solutions where food can be grown in shipping containers in which technology controls water, temperature and humidity. Beans, legumes and sprouts grow in six days and each container can produce one tonne of nutritious food per day. This innovation, motivated by hunger, can be applied to areas in need of food during emergencies.

Could you make or "manufacture" food ingredients at home, using a machine not unlike a printer? Researchers at Cornell University have successfully shown that cheese, bananas and mushrooms can be "printed" or made using a 3D printer attached to your home computer.

The 3D printer has "cartridges", but instead of containing ink, they are filled with raw ingredients that produce the food you want to create. The University of Southern California is working on "printing" potatoes and steaks on a home 3D printer, ready for the oven or barbecue pit. Hunger is indeed the overriding motivation for revolutionary innovative breakthroughs.



Food innovation: Researchers have found a way to 'print' certain food with a 3D printer.

As another example, Singapore which has long been dependent on Malaysia for water, has invested heavily in innovative water technologies.

The country is now able to produce drinking water from seawater and wastewater, with advanced oxidation processes that can remove contaminants and micro-pollutants that standard water treatment methods cannot. Hunger, or maybe thirst in this case, is the over-arching motivation.

Food security has become a major concern for all nations worldwide, and innovation is seen as the solution. Closer to home, Professor Fatimah Arshad of Universiti Putra Malaysia

states that food security is more important than ever to Malaysia and the "business as usual" model may not be sustainable.

She points out that Malaysia is a net importer of food; mainly rice, cereals, beef, mutton, dairy products and agricultural inputs. Her research shows that we import 30% of rice, 95% of milk, 89% of mutton, 71% of beef and 59% of vegetables for our domestic consumption.

We must innovate, especially when it comes to food. Malaysians claim to be experts at food consumption, yet why do we shy away from producing it when there is a clear market demand?

If we cannot produce food at the right price points, we have to ask ourselves why this is the case. Are we over-reliant on foreign labour and not enough on technology? Unlike Singapore, are we not adding enough value that would allow us to charge premium prices? Clearly, something is amiss. We have to find out what it is. When we do, we will have a more profitable market.

We should not look towards the Government to solve this problem. The food market is a free market in Malaysia, and consumers will gravitate towards whoever offers the best value.

May the best Malaysians win.

> *Datuk Seri Dr Kamal Jit Singh, CEO of Unit Inovasi Khas, is hoping to jolt Malaysians out of complacency. If you have innovative solutions of your own, share your ideas with him at: feedback@genovasi.my.*