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Focus-Agriculture

ECONOMIC CRISIS SERVES OUT EXPENSIVE FOOD BILL

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KUALA LUMPUR: There are many useful lessons to be learnt from the economic crisis and one of the most obvious is the need to rebuild the nation's strength in agriculture.

In a way, Malaysia has come full circle, having evolved from an agro-based economy dependent on commodity exports to a manufacturing-based economy and then, to multi-media and information technology.

Along the way, agriculture, particularly food production, took a back seat till the financial maelstrom of 1997 hit the region and Malaysia, which has to grapple with a huge bill for food imports, ranging from coconuts, meat, vegetables to fruits.

Now, economic planners and managers are calling for a right policy mix and a return to the basic as the economic crisis has clearly demonstrated the importance of agriculture and food production.

This expensive wake-up call came up to RM10 billion for food imports in 1998, a hefty bill during a time of economic hardship. Food, by the way, accounted for more than 60 percent of the Consumers Price Index (CPI).

Thus, agriculture must be re-vitalised and re-purposed not just as an economic engine in the production and export of food but also as an instrument for food sufficiency or food security, so said the country's economic planners and intellectuals.

For this purpose, Universiti Putra Malaysia (formerly known as Universiti Pertanian Malaysia) has taken up this challenge and is formulating a programme to create a new breed of farmers who will be equipped with skills and knowledge, pre-requisites in food production of the century ahead.

Old Perception of Farmers

The perception of ageing farmers with meagre earnings will change as "agro-technopreneurs" take over as the new captains of the agricultural sector.

Dean of UPM Faculty of Agriculture Prof Mohamed Yusof Hussein said that agriculture would be revolutionised because to be a food supplier, the industry had to modernise, mechanise and embrace biotechnology to boost productivity.

"The agricultural transformation might occur in 10 years at least, although the first decade will be critical," he told Bernama in an interview.

His optimism in the industry is reflected in a paper which he co-authored with UPM's Dr Makhdzir Mardan and Assoc Prof Mad Nasir Shamsuddin and presented at the Agex '99 convention here recently.

"Malaysia has the potential to recapture its old stripes of the Old Spice Route, into the New Spice Route in food supply of the world in the new millennium," the paper stated, referring to the early history when the world called on the Malay peninsula for spices and food in those days of long and perilous sea voyages for trade.

PRECISION AGRICULTURE

"Malaysian agriculture needs to be repositioned in order to become more efficient, productive and competitive," the paper said.

The challenge would be tremendous because the country would be going into the production of food crops. Rubber and oil palm have been managed as

estates which the country had proven its expertise, unlike field crops.

Yusof said to be efficient, productive and competitive, new technologies had to be practised such as precision agriculture which involved the use of satellites in making informed, accurate, timely and technologically appropriate decisions while cutting production costs, reducing wastage and limiting environmental damage, among others.

Nutrient formulation in hydroponics (soilless agriculture), a form of precision agriculture, could be practised in urban areas because of scarcity of land.

Its intensive nature required optimum and efficient use of space and resources such as water, electricity and other inputs.

This form of agriculture is environment-friendly and totally sustainable, and there is a market for hydroponic agricultural produce, Yusof said.

The other type of soilless agriculture is aeroponics.

One such farm, commissioned in January this year, is producing temperate and sub-tropical vegetables as import substitution.

Dr Gan Lian Tiong, general manager of the Agritech Business Division of Sime Darby Plantations, which owns the 5ha farm near Seremban, said since the greens were planted in a greenhouse, no pesticide is needed.

The temperate greens are sold at 30 percent cheaper than imported ones but the sub-tropical crops are priced at about 10 percent above local vegetables.

The farm produce has a niche market and sold through supermarkets, wholesalers and direct marketing, they are gaining popularity among the masses mainly because they are pesticide-free.

Gan said aeroponics agriculture is entirely environment-friendly as little water is used and whatever is discharged is not polluted.

The farm, situated in the outskirts of an urban centre, testifies to Yusof's reckoning that urban farming may become a trend in the near future.

BEYOND RUBBER AND OIL PALM

"Mechanisation is necessary as agriculture is growing more scientific but farmers are hesitant because of the heavy investment in machines and not all the processes in crop production could be mechanised.

"This being the case, incentives are necessary to encourage mechanisation," he said.

However, Malaysia needs local engineers to design and invent equipment because they understand the topography of the land better and could appreciate the needs of the country's farmers.

Looking beyond rubber and oil palm, Yusof suggested the cultivation of field crops such as corn and tapioca, apart from fruits and vegetables.

He also proposed that the Primary Industries Ministry consider promoting the crops and treat them as an export commodity.

"It might even find a +star+ in one of the food crops," he said.

OUTSOURCING EXPERTISE IN R&D

The authors in their paper presented at the Agex convention also mentioned outsourcing for expertise in research and development to boost agriculture.

They proposed that "Malaysian-owned agricultural plantations establish a foundation at leading internationally-renowned research institutions to spearhead genetic engineering research and designing of tropical crops and livestock.

"We should take advantage of Malaysian students studying in universities abroad, by awarding them internship with an appointed research institution in genetic engineering in agriculture, thus ensuring good

investment in both human resource and patent development."

This, they said, would provide a technological quantum leap in agriculture production for Malaysia.

Planning, training and policy aside, one of the quickest ways to elevate food production into a big business is to steer mega companies and corporations to agro business.

If there is big money to be made, these corporations and private enterprises can lead the way to realise Prime Minister Datuk Seri Dr Mahathir Mohamad's "next" vision of reorientating Malaysian agriculture for business. -- Bernama

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