

# HDB rooftops as farmland?

From being just a passive food importer, Singapore now plays a more active role in food security initiatives

BY YANG RAZALI KASSIM  
FOR THE STRAITS TIMES

**F**OOD security is an emerging global concern. Certain realities define food security planning for Singapore: It is not an agricultural country, has not much land to grow its own food, and is almost totally dependent on food imports.

As such, Singapore may be viewed as being just a passive food importer – perpetually subject to the vagaries of external forces when it comes to feeding its own people.

Such a reading, however, could change.

There are indications of a fundamental rethink in Singapore's food security strategy. Indeed, a mental map of a multi-pronged strategy, spearheaded by re-

search and development, is emerging on Singapore's food security front that could turn old limitations into new strengths.

The clearest indication came out of the inaugural International Conference on Asian Food Security on Aug 10-12, held here and initiated by the S. Rajaratnam School of International Studies.

Senior Parliamentary Secretary for Defence and National Development Mohammad Maliki Osman spelt out how Singapore is moving to become a contributing player to support the global quest for a more stable global food system amid volatile supplies and prices.

There are four prongs to this strategy. The first is research and development. Singapore will leverage on its excellent infrastructure, intellectual property regime, a pro-enterprise tax structure and a financial ecosystem that supports both publicly and privately funded research.

Its National Research Foundation recently awarded a US\$8.2 million (\$99.9 million) grant to a joint project between the National University of Singapore, the Temasek Life Sciences Laboratory and the International Rice Research Institute,

to address pressing food concerns such as the need to develop rice strains that can adapt to climate change. The potential benefits extend beyond Singapore.

The second strategy, related to the first, is to grow Singapore into an agribusiness hub. The Economic Development Board is encouraging big players to set up their operational headquarters and trading operations, as well as engage in upstream research, in Singapore.

Two examples are Syngenta and Bayer CropScience, whose research laboratories aim to develop "elite" crop varieties for the region.

The third strategy is to turn Singapore's own domestic market into a "test lab" of sorts, especially for urban agriculture.

Singapore's highly urbanised population could be turned into an advantage by pursuing urban farming. Indeed, Singapore could leverage on its dense population to find unique, urban solutions to food security.

Agricultural production can be creatively brought within the city space, such as through "rooftop farming", thus reducing Singapore's reliance on food imports.

The success of urban farming can eventually be shared and replicated in other cities, said Dr Maliki. One pilot project on rooftop farming was started last year when the Agri-Food and Veterinary Authority engaged a local company, Sky-

Greens, to do a commercial "vertical farming" prototype.

Singapore's potential in urban farming has attracted quiet international attention. The Urban Agriculture Network (UAN) set up under the auspices of the United Nations Development Programme once declared Singapore a possible world leader in some aspects of urban agriculture – food production from its residential and commercial rooftops.

In other words, the rooftops of thousands of HDB blocks can potentially be turned into urban farmland. New economic opportunity for Singapore could come from two particular techniques – aeroponics (growing plants without soil and water) and aquaponics (growing plants using recycled fish waste).

According to the UAN's Western Pacific offshoot in Australia, these two technology spin-offs from hydroponics and aquaculture could make Singapore a world leader in rooftop production of fresh vegetables, fruit and flowers; certain types of seafood in specially designed containers; and a greener, cleaner cityscape that contributes less to global warming and therefore climate change.

A fourth, but no less important, strategy is the shift towards greater local pro-

duction of three key food items – eggs, leafy vegetables and fish. A \$20 million Food Fund, launched in December 2009, is in place to incentivise farms to explore new farming technologies to ensure Singapore's food supply resilience.

Singapore's multi-pronged strategy fits in with the search for holistic solutions to solve food security issues. It dovetails with at least three fronts in the global action to tackle food security: Asean, through the Asean Integrated Food Security Framework; the Asia-Pacific Economic Cooperation forum through measures to enhance food security within the Asia-Pacific region; and the Group of 20 which aims to tackle food price volatility through international coordination.

In a nutshell, Singapore's overall strategy is to seek win-win partnerships locally, regionally and globally as food security issues transcend national boundaries.

By taking care of its own needs while being useful to the world, Singapore is now playing its part in tackling the global food security problem.

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Supporters crowding around the car carrying Mr Hazare to a protest venue in New Delhi last Friday. Mr Hazare's movement has galvanised a large number of people, but there may be flaws in their belief that the Lokpal will be a one-time panacea for graft in India. PHOTOS: ASSOCIATED PRESS

## The Anna Hazare phenomenon

BY RONOJOY SEN  
FOR THE STRAITS TIMES

**A** WEEK ago, the name Anna Hazare would not have rung a bell with most people outside India. But since his arrest on Aug 16 – a day after India's independence day – and his ongoing, indefinite hunger strike in New Delhi demanding a strong anti-corruption authority in India, Mr Hazare has become a global name.

The controversy over a strong anti-corruption agency – or Lokpal as it is being called in India – has been brewing since April this year. That was when Mr Hazare, a former soldier turned activist, and his supporters staged a hunger strike for four days forcing the government to draft new legislation for a Lokpal, an idea that was mooted as far back as 1968 but had been shelved since. Mr Hazare and key members of his team were taken on board by the government to draft the new legislation, but they later walked out over some of the provisions of the Bill.

As the situation stands today, the government has placed a draft Lokpal Bill in Parliament which is being vetted by a parliamentary committee. But Mr Hazare and his team have disagreements with the version before Parliament. Some of their main objections are towards keeping the Indian Prime Minister, the conduct of MPs inside Parliament and the senior judiciary outside the ambit of the Lokpal.

Though corruption is widespread in India and can be traced back to the very first years of independent India, the magnitude of recent corruption scandals has brought the issue to centre stage. What began with allegations of corruption against the organisers of last year's Commonwealth Games in New Delhi was dwarfed by one of the biggest scams in independent India's history involving allotment of spectrum for wireless telephone services, which is estimated to have cost the Indian exchequer as much as US\$40 billion (\$48 billion). Three Members of Parliament, including a federal minister, are in jail for their alleged involvement in the scams.

Mr Hazare's anti-graft campaign has tapped into the deep resentment among India's growing middle class against corruption and politicians, whom they see as venal and self-serving. For large numbers of India's middle class, Mr Hazare has emerged as a crusader on whom they have pinned their hopes of checking corruption. Though the anti-corruption protests have been concentrated mostly in metropolitan cities, the response in New



Mr Hazare in front of a Mahatma Gandhi portrait at the Ramila Grounds in New Delhi on Monday. Fasting to attain political goals has a history in India, but a distinction needs to be made between a hunger strike against a democratically elected government and one against a foreign regime.

Delhi has hardly been matched in other parts of India.

The scale of protests over the last few days has something to do with the Indian government's poor handling of the issue. The right to protest is fundamental to any democracy, and the government's decision to arrest Mr Hazare even before he began his hunger strike boomeranged. More people came out into the streets to protest than might have been the case had the hunger strike been allowed to proceed normally. The opposition parties, too, found it a handy stick with which to beat the government.

Several questions remain about Mr Hazare's movement and its solutions to tackle corruption. One is his method of resorting to a fast-unto-death to achieve his goal. Fasting to achieve political goals has a long history in India, going back to Mahatma Gandhi's numerous hunger strikes against colonial rule. But one needs to make a distinction between a hunger strike against a democratically elected government and one against an oppressive, foreign regime. Indeed, this

distinction was made by the man who is known as the father of the Indian Constitution, Mr Bhim Rao Ambedkar, who believed that the Gandhian methods of fasts and civil obedience had no place in a constitutional democracy. Besides, the belief of Mr Hazare and his followers that they are the true representatives of India's more than 1.2 billion people and that they can dictate terms to an elected Parliament is very disturbing.

Mr Hazare's movement was responsible for bringing back corruption to top of the agenda in India. It has also galvanised a large number of people, waving flags and shouting patriotic slogans, who are not known to take to the streets for political causes. But their belief that the Lokpal will be a one-time panacea for corruption in India is naive to say the least.

The writer is a visiting research fellow at the Institute of South Asian Studies at the National University of Singapore.

Second, it is unclear whether the sort of anti-corruption body with sweeping powers that Mr Hazare and his followers are proposing is desirable. In the name of tackling corruption, it would mean vesting incredible power into one institution, which has the potential of destroying the checks and balances of a democracy and undermining the very institutions that have struggled to strike root in India. The talk now is about corruption in high places and multibillion-dollar scams. What is much more difficult to tackle is the daily, endemic corruption that the average Indian faces – and is often complicit with in dealing with government institutions and bureaucrats.

Third, the nature of Mr Hazare's movement is such – backed mostly by the middle class and relentlessly covered by the media – that it demands immediate solutions to the problem of corruption. It has no patience for the institutions, which despite many problems, are at the heart of Indian democracy.

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## Karachi carnage reveals fault lines

BY SAJJAD ASHRAF  
FOR THE STRAITS TIMES

**T**HE violence which claimed about 100 lives in Karachi during the last six days was only the latest chapter in the Pakistani port city's long history of conflict.

According to the Human Rights Commission of Pakistan, more than 800 ethnically and politically linked killings were reported in the city in the first seven months of the year. About 300 of the deaths occurred last month alone. And more people – 1,510 – died in targeted killings in Karachi last year than in terrorist attacks in the whole of Pakistan, which claimed 1,138 victims.

Karachi, the business hub of Pakistan, contributes the bulk of the country's revenue and manufacturing capacity and about a fifth of its gross domestic product. It is one of Pakistan's two commercial seaports, the adjoining Qasim being the other.

The seeds of Karachi's long-running battles can be found in the city's ethnic divides. At independence, Urdu-speaking refugees from India – the Mohajirs – migrated to Karachi in great numbers, setting the scene for potential conflict with the local Sindhis.

Following the Soviet invasion of Afghanistan, Karachi experienced a huge migration of Pashtuns, who are said to make up close to four million of the city's 18 million residents now. The new arrivals deepened the sectarian divisions.

Reflecting the demographic changes, the Awami National Party (ANP), which is associated with the Pashtun population, won two Sindh provincial assembly seats in the February 2008 elections. This was the first dent in the political bastion that the Muttahida Qaumi Movement (MQM), a party that depends on Mohajir support, had built in Karachi. At present, the MQM holds 34 of the 42 seats which Karachi has in the Sindh provincial assembly.

But Pashtuns keep pouring into the city from the north and the Mohajirs cannot increase their numbers to match them. At risk of becoming totally outnumbered, the Mohajirs occasionally call for a province of their own. This brings them into conflict with the Sindhis, who naturally resist the dismemberment of their province.

The changing demographics and resultant political muscle-flexing, coupled with criminal gang activity, explain Karachi's frequent descent into chaos and the current outbreak of violence. The city has become a battleground for aggrieved ethnic groups constructing their identities through confrontation. This has devastating repercussions for

Pakistan's economy and political fabric. It does not help that Karachi is awash with weapons or that the country's politicians are more interested in shoring up their own positions than in tackling the violence.

The Zardari government's response has been typically short-sighted, choosing to save its coalition with the MQM whatever the cost.

As for the latest round of killings in Karachi, the authorities in Sindh province responded first by abolishing the local government system, then restored it under MQM pressure.

Sindhi nationalist parties and the ANP have condemned the reversal, which they believe is to their disadvantage.

This flip-flop in favour of the MQM was negotiated by the Interior Minister and a former law minister, both confidants of President Asif Ali Zardari, and has caused fissures within the Cabinet. Ministers from Sindh have openly asked for the two to be excluded from politics in the province.

In a significant development, the army, which had been quiet after several setbacks, has issued a statement expressing concern over the law-and-order situation in Karachi and its ramifications and implications for the national economy".

The army also said it hoped the government's recent measures would help to end the violence in the city. These are ominous signs as the Pakistani army has been known to intervene in less volatile situations.

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