

**SPEECH BY MS TAN POH HONG, CEO (AVA)
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*Food security strategies for Singapore:
Why does it matter?*

Mr Koh Soo Keong
Chairman,
Agri-Food and Veterinary Authority

Members of the GPC(ND)
Mr Seah Kian Peng, MP for Marine Parade GRC
Mr Gan Thiam Poh, MP for Pasir Ris-Punggol GRC

Mr Hiroyuki Konuma,
Assistant Director-General and Regional Representative for Asia-Pacific,
Food and Agriculture Organisation

Good morning,

Distinguished speakers

Ladies and gentlemen

1. A warm welcome to AVA's inaugural Food Industry Convention. I am delighted to see many partners from the various sectors in our food and related industries, members of the academia and our colleagues from other government agencies. Thank you for taking time off your busy schedules to be with us today.

2. For the past few years, food security has been in the news, both at the domestic, regional and global arena. Though the concerns may vary for different nations, food security is a topic of concern for all policymakers.
3. As a country that imports over 90 percent of our food supply, Singapore is vulnerable to changes and developments in food supply and food prices. To ensure that we can continue to enjoy affordable and safe food, it is important that we review and update our food security strategies regularly so that they continue to be relevant. Before I delve into the specifics of our food security strategies, let us first examine what food security means to Singapore and where do we stand when we compare ourselves with other countries in this area.

What is Food Security and how food secure is Singapore?

4. In Singapore, food security is defined as ““Access to safe and nutritious food, for all Singapore citizens and residents, at affordable prices in the short and long term”. When we talk about access to safe food, it is about being able to buy food that is safe for consumption, easily. In Singapore’s context, we can comfortably say that this is achievable. In fact, we have access to food 24/7 since there are food outlets operating throughout the day. Singapore also enjoys a wide variety of food at affordable prices.
5. How is Singapore doing on the food security front? The Economist Intelligence Unit’s latest Global Food Security Index (GFSI in short) ranks Singapore as 16th amongst 107 countries, and 1st in Asia. This is the first time that Singapore was included in this Index. Although GFSI may not be an official indicator for food security, it could be taken as a proxy of how we stand amongst other countries. Being ranked first in Asia is no mean feat considering that we do not produce most of our food. Our high overall ranking is primarily because of our relative affordability of food and high food safety standards, both of which we take pride in. However, as Minister Khaw has said in his speech this morning, we must not rest on our laurels and take for granted the access to affordable and nutritious food that we have now.

Singapore is part of a global community and is therefore susceptible to many of the global food security challenges.

Food Security Roadmap

6. As one of newest members of FAO, Singapore has been active on the international front. This has kept us well informed on regional and global food security developments. This is so that our strategies remain relevant, not just for the present, but also for the foreseeable future. For example, I was in Rome on Monday to attend FAO's Committee on World Food Security Meeting. This is a forum in the UN Systems for review and follow-up of policies concerning world food security. And the FAO has designated 16th Oct as World Food Day - with the theme "Sustainable Food Systems for Food Security and Nutrition. It helps increase understanding of problems and solutions in the drive to end hunger. This convention today is part of Singapore's observance of World Food Day. We hope to hear from the industry and work with you on how we can observe World Food Day in future years.
7. In addition, Singapore has also been working closely with ASEAN Member States to establish an Integrated Food Security (AIFS) Framework and the Strategic Plan of Action on Food Security (SPA-FS). This is to ensure our long term food security at the regional level.
8. Unlike our neighbours in the region, Singapore is not an agriculture country. We need to do more and do things differently. So what does Singapore's Food Security Roadmap entail? As Minister has highlighted, this Roadmap is a result of extensive consultations with industry players and government agencies. It serves as a guide for a holistic food security strategy for Singapore and addresses key risks and gaps to Singapore's food security. The Roadmap consists of Core, Supporting and Enabling strategies. Core strategies are the main point of focus for Singapore going forward. Supporting strategies address additional aspects around Singapore's food security and should be considered important in the medium to long term. Enabling

strategies facilitate the implementation of core and supporting strategies. Minister Khaw has mentioned some of the strategies earlier, and allow me now to share with you the strategies in detail.

Diversifying sources of food imports

9. Our Core strategies for food security focus on the diversification of our food sources, as well as local production. At the national level, stockpiling has already been implemented for rice.

10. Diversification means putting our “eggs in many different baskets”. It minimises the impact of supply disruptions and allows us to tap on alternative supplies from other countries. Diversification is also done strategically. To determine which sources to explore, we take into consideration factors such as proximity to Singapore, existing diversity of sources from different geographical regions, as well as food safety risks. AVA works closely with the food industry and conducts sourcing missions to different countries. The industry also conducts their own sourcing trips in line with their diversification strategy. For example, in 2013, AVA conducted overseas sourcing trips to countries such as Indonesia, Philippines, Israel, Poland and Denmark to help our industry players build networks and connections in these places.

11. Is there anything more that we can do? We can go a step further. We can and should secure food at source. By moving upstream, closer to food sources, we can have greater control over a food commodity’s supply and quality, as well as obtain first right of purchase in times of supply crunch. In fact, there are food importers that have begun doing so. To secure their supplies, some local vegetable importers have embarked on contract farming in Vietnam, China and Indonesia. And some supermarkets have done so in a big way for various fresh food products. Earlier, Minister has also cited the Jilin Food Zone as another example of securing food at source. Some Singapore companies have started to invest there - SATS/ SFI has invested in an integrated pig farm project, whilst Keppel T&T is developing a cold chain logistics park. Singbridge, has signed an agreement with the Jilin City

Government to form a joint venture company to provide management and technical services relating to the development of the Jilin Food Zone, as well as to focus on the investment and promotion activities of the Zone. I understand from Singbridge that they will assist to secure the most preferential terms for Singapore investors to encourage investment in the Food Zone. They will also be available on site to support and facilitate set up of company and operations.

12. I hope more companies can emulate these companies in moving upstream and engaging in contract farming practices, or investing abroad to secure food at source.

Optimising local food production by increasing productivity

13. Local production is another core component of our food security roadmap. Local farms can provide a buffer in times of sudden import disruptions. They can also provide some level of psychological comfort to Singaporeans and serve as a platform to test-bed agricultural innovations to increase food supply. Having an active local farming sector also ensures that commercial farming skills and expertise within the country are not lost. This provides us with the option to increase our capacity in three key food items (namely leafy vegetables, fish and eggs) should the global food supply situation warrant it. However, as Minister has pointed out, with limited farm land, we cannot be farming the traditional way with large rural land and abundant farm labour. We need to do more with less. We need to enhance our farming technology and increase productivity.

14. We have been facilitating our local farms in these areas through our Food Fund. For example, a local poultry farm tapped on our Food Fund to purchase a robot cleaner that reduced the time taken to clean a layer house by 25-33% and manpower requirements by 80%. This reduction in manpower frees up 5 headcounts for the farm annually. Another project that created a significant impact in productivity was a water quality monitoring system that was implemented on a fish farm off the coast of Lim Chu Kang. This system was

able to monitor the dissolved oxygen (DO) levels in the fish nets and alert the farmer through SMS when low DO is detected. This information is received daily and can be archived so that water quality trends can be studied and potential fish kills avoided.

15. As for farming technology, we can look at existing technologies overseas and adopt relevant ones. For instance, earlier this year, we visited Israel with our farmers and research institutes. Israel's technological advances in vegetables, fish and egg production systems were impressive and some members of the industry have expressed interest to bring some of these technologies into Singapore. AVA will work with them to see how we can adopt and improvise on some of these environmentally sustainable technologies for our urban tropical environment.

16. As we develop new technology and upgrade farm capabilities, we need to imagine what the future of farming would be like. A recent BBC article predicted that in 2050, there will be 'Farmscrapers', which are 'high-rise' farms that will provide space for residents, offices, retail and recreation as well as food production. Prototypes of these 'high-rise' farms are already being tested around the world, for example Aerofarms from New York, designed for aeroponics farming and Plantagon from Sweden, integrates farming with a conventional building. It is heartening to note that Plantagon had recently signed an MOU with NTU to develop a first tropical prototype of their planting system for Singapore. While it may be some years before commercialisation becomes feasible, we must always look ahead to envision new possibilities in local farming for ensuring our food security, and try to work towards that future in the present.

17. In our own local farming scene, we do have some resemblance of the Aerofarm from New York and the Plantagon from Sweden. This is the outcome of a successful, government-industry collaboration between AVA and a private company to develop a prototype, which has now been commercialised into a farm in Lim Chu Kang. I am referring to Sky Greens, the first commercial vertical leafy vegetable farm for Singapore and possibly

for the world. Sky Greens has helped to place Singapore in the international spotlight and has been cited in various international media when vertical farms are mentioned - BBC, CNN and National Geographic, just to name a few.

18. The examples that I have just cited are indeed exemplary ones. I hope many more will heed Minister's call to invest in technology to achieve efficiency so that they can grow more with less resources.

Stockpiling- can we extend it to other food products?

19. Besides diversification and local production, stockpiling is another Core strategy in our Food Security Roadmap. Stockpiling can offer a fair degree of food security and can be used for price stabilisation in times of short term shortage. In Singapore, this strategy is currently applied to rice where it is mandatory for rice importers to hold a 2-month stockpile in government warehouses. Rice is chosen as it is a staple that is widely consumed on a daily basis. Are there other food commodities that should similarly be stockpiled? Does a stockpile have to be physically present in Singapore? Considering that Singapore is land scarce, can our stockpiles be managed regionally like the ASEAN Plus Three Emergency Rice Reserve? Can we explore a virtual stockpile where a futures contract is secured with a big rice producer or rice producing country such that it can be called upon in times of need. These are questions that the government and the industry will have to mull over for the purpose of food security. We should leverage on our efficient logistics and distribution system when considering our options.

Supporting Strategies

20. Other than Core strategies, there are Supporting strategies in the Roadmap. These strategies are important to us in the medium to long term. These include food waste reduction, greater use of financial instruments to hedge against short-term food price volatility and greater engagements with social agencies to look into food affordability. In reducing food waste, AVA and NEA are working together to educate food manufacturers, retailers, food importers,

food producers and other stakeholders along the food supply chain on waste management. We are also encouraging R&D activity in food waste reduction and recycling. For example, food waste could be reduced through better post-harvest management and storage to prolong shelf-life. Some examples include more efficient and better cold chain as well as active food packaging technologies.

Enabling Strategies

21. Lastly, let's look at Enabling strategies. These strategies ensure that the core and supporting strategies in the food security roadmap are effectively implemented. One such example is the formation of a multi-agency committee comprising of key government agencies that deal with food. This committee will facilitate better coordination and communication among agencies in policy formulation and implementation for the purpose of food security. This inter-ministry committee comprises members from several agencies such as AVA, EDB, IES, SPRING, NEA, and ministries such as MFA, MHA, MND and MOH.

Everyone has a role to play in ensuring food security

22. However, food security cannot be driven solely by the government. As highlighted by Barry Desker, Dean of the S Rajaratnam School of International Studies at NTU, in a recent article in the TODAY newspaper, it is increasingly challenging to maintain food security. There is a need for governments to work with the private sector and other key stakeholders to develop an integrated and holistic approach to policy formulation and implementation.

23. We recognise that the industry have a major role to play in both policy formulation and implementation. We hope to have your continuous support in ensuring a stable food supply for Singapore. We would also like to encourage you to work in collaboration with each other, for more synergies in achieving economies of scale and cost efficiencies.

24. Such collaborations include demand aggregation in food sourcing, as well as aggregation of logistics, warehousing and distribution functions. I am encouraged that a few seafood and meat importers, after some of our AVA-led sourcing trips, have come together to collaborate and aggregate their buying from overseas.

25. Another way of streamlining operations is to outsource distribution functions to 3rd party logistics (3PL) companies. This can result in significant cost savings, especially in transport and labour. Mr Foo Say Chuang from CWT, will share about the benefits of this arrangement in his presentation later. I also hope that you will glean insights from the sharing by PWC's Mr Richard Skinner, on opportunities for the food industry in working towards food security.

26. I assure you that the government will continue to do our part in addressing food security concerns. As stakeholders in the industry, you can do your part as well. I am confident that together, we can ensure that Singapore continues to have access to safe and nutritious food at an affordable price now and in the future.

Thank you.
