

**SPEECH BY MR LIM CHUAN POH, CHAIRMAN OF SINGAPORE FOOD
AGENCY, AT THE AQUASG 2019 CONFERENCE ON 2 OCTOBER 2019 AT
TEMASEK POLYTECHNIC**

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Distinguished guests,

Ladies and Gentlemen,

1. A very good morning to all of you. Thank you for inviting me to open the AquaSG 2019 Conference.

2. AquaSG was started to provide a platform for industry players and academics in the aquaculture sector to exchange ideas and build networks. This is the fourth in the series and I understand that we have about 150 participants from both local and overseas organisations joining us at the conference today. I am also glad to know that we have distinguished speakers from various related fields to share their insights and noted that there is a new segment this year where both local and overseas start-ups will be given a chance to make their pitch at the Yield Lab aquaculture challenge.

The Singapore Food Story

3. As a city-state that imports more than 90% of our food, Singapore is vulnerable to external shocks and global trends that impact food supply and safety around the world. To strengthen our food security, SFA is pursuing three broad strategies, also known as the three food baskets. These are, “Diversify Import Sources”, “Grow Local” and “Grow Overseas”.

4. For the “Grow Local” basket, we have an ambitious target of achieving “30 by 30”, that is, to have the capability and capacity to produce 30% of Singapore’s nutritional needs locally by 2030. To do so, our agri-food industry will have to transform

to significantly raise productivity while overcoming our resource constraints and this process includes adopting new solutions, leveraging on R&D, and employing climate-resilient and sustainable technologies among others.

5. Aquaculture is one of the sectors that will contribute to Singapore's "30 by 30" goal. According to the FAO, it is probably the fastest-growing food sector globally. Farmed fish now exceeds wild caught fish as a source for food. However, to feed the growing world population and demand for seafood, aquaculture needs to be more environmentally sustainable and resilient.

6. A recent science-based report by the FAO highlighted the impact of climate change on aquaculture. These include short-term production losses due to increased risk of diseases and harmful algal blooms, as well as long-term consequences such as scarcity of wild seed or fingerlings, and fishmeal for farming.

7. Climate change can also affect food safety, for example, through changes in growth rates of pathogenic bacteria, or increased incidence of parasites and food-borne viruses. Hence, it is fitting that the theme of this year's AquaSG is "Seafood Security and Safety: An Aquaculture Perspective".

Singapore as a leader in tropical aquaculture technology

8. I am confident that Singapore can become a leader in tropical aquaculture technology in time to come. Over the years, we have seen steady strides taken by our industry to embrace innovation and technology to foster an increasingly vibrant aquaculture ecosystem.

9. For example, some of our coastal fish farmers have adopted closed containment farming systems to mitigate risks of plankton blooms and oil spills. Singapore Aquaculture Technologies is among the first to do so in 2014. Their system protects farmed seabass against adverse environmental conditions while achieving four times higher productivity than that of conventional open net cage system.

10. On land, we are also seeing innovative developments by farms such as Apollo Aquaculture Group's multi-tier vertical farming system, which is now being built at Lim Chu Kang. This new farm will incorporate sustainable features such as treating and recycling the water from the fish raceways, and using its nutrient-rich wastewater to grow aquatic plants and vegetables to minimise waste discharge.

11. Besides farms, there are also aquaculture input companies in Singapore such as Uvaxx that develops autogenous vaccines and Allegro-Aqua that is now commercialising the faster-growing St John's Seabass.

12. Our Institutes of Higher Learning (IHLs) have also collaborated with agencies such as SFA and A*STAR to launch the Aquaculture Innovation Centre (AIC) in June this year. The AIC is Singapore's first-of-its-kind Innovation Centre that adopts a collaborative approach where members pool resources and expertise to conduct research, training and services for the aquaculture industry. Several members of the aquaculture industry also sit on the AIC's Advisory Committee.

13. Through this consortium approach, our IHLs, agencies and industry will be better able to reap synergies and advance our ambition to make Singapore a leader in tropical aquaculture technology. I commend Temasek Polytechnic for leading and hosting this initiative.

R&D as an important enabler

14. R&D will play a key role to plug existing technological gaps. To support our "30 by 30" goal, we have developed the Singapore Food Story R&D programme, and the Government has allocated \$144 million towards the programme from its Research, Innovation and Enterprise 2020 (RIE2020) plan. One of the three areas funded under this programme is Sustainable Urban Food Production, which includes tropical aquaculture, with a focus on developing solutions in genetics, nutrition, and disease and health management.

15. The supply of aquaculture inputs such as fish fry with superior genetics, and health and nutrition solutions to reduce fish mortality will improve our own local production. In addition, the supply of these knowledge-intensive inputs to overseas farms can also position Singapore as a valued node in the regional or international aquaculture supply chain, thereby contributing to global food security.

16. As we seek to grow our aquaculture industry, we will also need to nurture the aquaculture ecosystem along the entire research, innovation and enterprise value chain. To facilitate and catalyse aquaculture research, SFA's Marine Aquaculture Centre will make available its aquaculture research facilities, such as experimental tank systems for the research community here. In addition, SFA has also been engaging our research community and industry to shape the first R&D grant call to co-create solutions to tackle relevant industry challenges.

Conclusion

17. Lest we forget, food security is also about nutritious food. Fish contributes significantly to the human diet in terms of high quality, easily digestible animal proteins and helps fight micronutrient deficiencies. Hence, it is also a timely reminder that World Food Day on 16 October this year calls on "Healthy Diets For A #ZeroHunger World". Zero hunger goes beyond hunger and it means having enough nutritious food for everyone, everywhere, as we work towards the Sustainable Development Goal of Zero Hunger by 2030 – an area which the aquaculture sector can contribute towards globally.

18. In conclusion, let me say that the aquaculture industry is entering exciting times. Our local aquaculture production has been increasing, and has doubled in value since 2010. As the industry continues to innovate and build their capabilities through R&D and collaborations with our IHLs, we can enhance our food security and contribute to our "30 by 30" goal. SFA will work with our agri-food industry to transform into one that is highly productive, and employs climate-resilient and sustainable technologies that will enable us to overcome our resource constraints.

19. I hope that the exchange of ideas and knowledge at this conference will foster new partnerships to develop sustainable urban food solutions and innovations for Singapore and the world and, in the process, make Singapore a leader in tropical aquaculture technology.

Thank you.