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Ensuring Singapore's food security: Opportunities in real estate

Photo by Joanna Malinowska

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COVID-19 and the rise of food insecurity

One of the consequences of the COVID-19 pandemic so far is a reduction in food security in Singapore. Consider factors such as panic buying, hoarding, country lockdowns, and strained global and regional logistics networks. All these and more have cumulated to threaten the reliable access to sufficient and affordable nutritious food that those in Singapore take for granted.

Singapore is not the only country at risk from rising food insecurity. The World Health Organization (“WHO”), World Trade Organization (“WTO”), and United Nations (“UN”) recently released a joint statement that the world could face a food crisis due to COVID-19 ¹.

But food security is not merely a transient short-term issue for Singapore. For the small island nation that imports 90% of its food from over 170 countries, food security has long been a key concern of the government². According to a recent interview with Singapore’s Deputy Prime Minister Heng Swee Keat, Singapore has and continues to take measures to guarantee its food security. A key prong of the country’s solution is encouraging local urban agriculture³.

The global rise of urban agriculture

Urban agriculture is a model of farming that involves cultivating food in and around urban areas. By bringing part of a city’s food basket closer to the consumer, food security can be improved. A city-state like Singapore that has scarce natural resources and depends greatly on food imports could see significant benefits from an increase in local food production.

The potential of urban agriculture is also not limited to growing plants. There are existing commercial examples of urban agriculture that involve animal and insect husbandry. The real estate context of urban agriculture is similarly diverse. Some urban farms have found their homes on rooftops, while others have taken up entire industrial buildings for their activities.

The potential and benefits of urban agriculture have made it a rising trend that is taking hold internationally. Most major cities across Asia Pacific (“APAC”), North America, and Europe have seen urban agriculture rise in prominence.

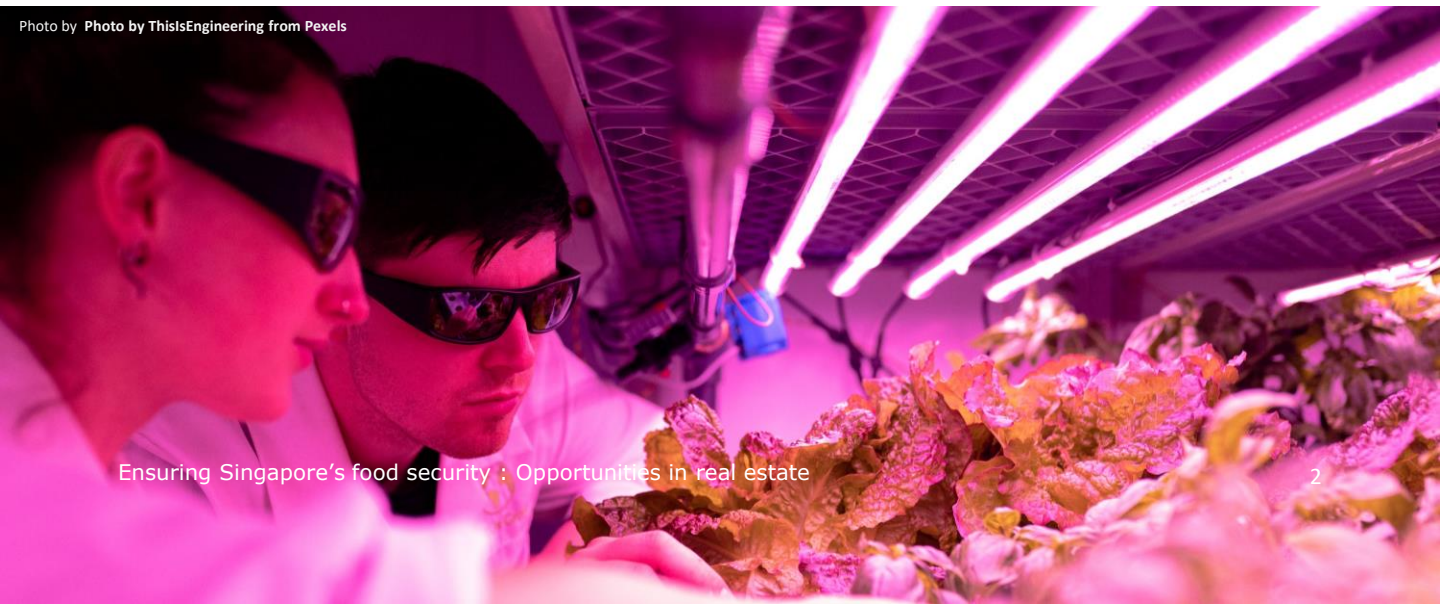


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Urban agriculture is thriving in Singapore

Urban agriculture's growth in Singapore has been especially rapid thanks to government assistance. Singapore government is highly supportive of the urban agriculture since it is a key tool in achieving the nation's "30-by-30" target. This 30-by-30 goal involves Singapore producing 30% of its nutritional needs domestically by 2030, up from about 10% currently.

The COVID-19 outbreak has added a greater push for the government to strengthen its support for local urban agriculture as well. In April 2020, the Singapore Food Agency ("SFA") responded to the pandemic by launching a new SGD30m grant⁴. The grant aims to boost local agriculture production and comes on top of an existing SGD63m grant initiative under the SFA's Agricultural Productivity Fund⁵.

Aside from bolstering financial support for local urban agriculture, the government will also continue to help urban agriculture firms meet their technology and real estate needs. On the technology side, the government announced in March 2020 that it will improve the Startup SG Equity Scheme to support start-ups in the agri-food tech space⁶. Development of such technologies will improve the productivity of Singapore's urban farms and protect the nation's food security if another crisis hits.

As for the real estate aspect, DPM Heng mentioned in April 2020 that the government will proceed with its plans to transform Lim Chu Kang into a "food estate" that focuses on food production using modern technologies⁷. This plan is set to complement the neighbouring Sungei Kadut area, which is already being turned into a cluster for high-tech agri-food tech, and will boost Singapore's food resilience.

A rooftop farm in Chicago
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Real estate opportunities in urban agriculture

Those in Singapore’s real estate sector should pay attention to the rapid rise of urban agriculture, as it is likely to create some new opportunities. For one, asset managers may want to incorporate infrastructure that support urban agriculture in their buildings. Doing so can potentially lead to ESG benefits and additional rental income.

Take *SCAPE for instance. The shopping mall in Orchard hosts a commercial urban rooftop farm providing fresh produce to nearby F&B establishments⁸. Another example includes Fairmont Singapore and Swissotel The Stamford. Both hotels implemented urban farms on their rooftops to boost sustainable practices while providing fresh fish and vegetables to the hotels’ kitchens⁹.

These examples demonstrate that for asset managers, urban agriculture may be a way to generate additional rental income by leasing out under-utilized space, such as rooftops. Additionally, these urban farms could help attract visitors to a development. The urban farm in *SCAPE helped bring people to the mall by providing routine farm tours, volunteer programs, and more prior to the COVID-19 outbreak.

Another potential opportunity created by urban agriculture involves investing in Singapore industrial assets in strategic locations. Going forwards, the urban agriculture sector is likely to show increasing demand for industrial buildings and cold-chain logistics. A good instance of this is Apollo Aquaculture Group. The Singapore-based company has a three-story automated indoor fish farm in Lim Chu Kang and is currently expanding to a new eight-storey facility that can also store produce.

As more urban agriculture firms reach commercial viability and start to expand, so too will their need for industrial and cold-chain logistic assets. Certain areas that the government is planning for urban agriculture firms, such as Lim Chu Kang and neighbouring Sungei Kadut, are likely to be more strategic for investors seeking to capitalize on this trend.

Finally, there are joint-venture (“JV”) potential between the urban agriculture and real estate sectors due to their economic synergies. The still relatively nascent urban agriculture sector in Singapore largely consists of start-ups that tend to be tight on resources. These urban agriculture start-ups are likely to see real estate players as attractive partners, since real estate costs will likely make-up a significant portion of initial capital expenditure, while logistic costs should form a large part of operating expenditure.

Real estate firms may also find urban agriculture players to be desirable partners. Aside from conveying ESG benefits, urban agriculture should provide stable recession-proof returns, especially since food is the ultimate necessity.



An indoor hydroponic farm in Japan shows how the future of agriculture may be inside industrial buildings
Satoshi KINOKUNI / CC BY (<https://creativecommons.org/licenses/by/2.0>)

Summary: Food insecurity and urban agriculture are here to stay

Food security is an issue that was highlighted and exacerbated by the COVID-19 outbreak. Furthermore, it is a problem that will remain even after the pandemic fades. Global demand for food is set to rise along with population growth, urbanization, and the rising middle-class. The UN's forecast that the world's population will expand by 1 billion between 2020 and 2030 means that more food will be required over the next decade.

Meanwhile, the world's food supply chains are already becoming more volatile due to pandemics, climate change, and more. In the past 6 months, there have already been at least three major events that have sent shockwaves throughout global food supply chains. The outbreak of African swine fever in China, spread of wildfires in Australia, and outbreak of COVID-19 across the world have all had significant impacts on food supply.

Rising demand for food coupled with growing uncertainty of supply will make food security a major long-term issue on the agenda for many countries. As a result, urban agriculture, which is one of the solutions to food security, is likely to be a trend that is here to stay. The real estate industry may benefit from keeping an eye on how urban agriculture develops so that it can be a forerunner in capitalizing on the opportunities.

Photo by Photo by ThisIsEngineering from Pexels



Endnotes

¹ <https://www.straitstimes.com/world/europe/world-could-face-food-crisis-in-wake-of-coronavirus-un-wto>

² <https://www.todayonline.com/singapore/big-read-far-peoples-minds-food-security-looming-issue>

³ <https://www.businesstimes.com.sg/government-economy/coronavirus-singapore-made-plans-years-ago-to-ensure-food-security-says-dpm-heng>

⁴ <https://www.straitstimes.com/singapore/coronavirus-new-30m-grant-launched-to-speed-up-local-production-of-eggs-vegetables-and>⁵ A private company valued at over USD 1 billion

⁵ <https://www.straitstimes.com/lifestyle/food/grow-local>

⁶ <https://www.straitstimes.com/politics/parliament-more-funding-new-co-working-space-to-help-companies-embrace-innovation>

⁷ <https://www.todayonline.com/singapore/masterplan-food-estate-high-tech-farms-build-singapores-food-resilience-dpm-heng>

⁸ <https://www.straitstimes.com/singapore/rooftop-farm-has-crop-of-new-ideas>⁷ Core, Value-Added, Opportunistic Funds focusing on Asia Pacific assets

⁹ <https://www.channelnewsasia.com/news/singapore/aquaponics-rooftop-farm-fairmont-swissotel-stamford-hotels-12082350>

About ARA Asset Management Limited

ARA Asset Management Limited (ARA or the Group) is a leading APAC real assets fund manager with a global reach. With S\$87 billion in gross assets under management as at 31 December 2019, ARA manages listed and unlisted real estate investment trusts (REITs) and private real estate and infrastructure funds in 28 countries. As part of its investor-operator philosophy, ARA also operates a real estate management services division with local teams to manage its assets worldwide.

ARA's multi-platform, multi-product global fund management strategy, combined with its dedicated teams with in-depth local knowledge and expertise, enables the Group to offer enduring value to investors. Built on a foundation of strong corporate governance and business integrity, ARA counts some of the world's largest pension funds, sovereign wealth funds, financial institutions, endowments and family offices as its investors.

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Sean Ng works as an Analyst at the Research & Strategy team at ARA Asset Management. His primary responsibilities include analysing the economic and property markets across Asia Pacific, and making strategic investment recommendations to the firm.

Prior to joining ARA in 2018, Sean worked at CPG Consultants, providing economic research to its Urban Planning and Integrated Solutions departments.

Having majored in economics at the University of Michigan, and equipped with brief experience in urban planning and facilities management, Sean offers an alternate approach to property market research.



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Dr Chua Yang Liang heads up the Research & Strategy team at ARA Asset Management. He is responsible for monitoring the economic and property markets across Asia Pacific, and providing strategic advisory to the Firm.

Dr Chua has almost 20 years' experience in the research and planning-related field. His most recent stint was with JLL where he headed their research teams across South-East Asia.

Trained as an urban planner, Dr Chua brings to the Firm a different perspective to property market research and he publishes original papers covering property market updates as well as investment and property related matters.

Dr Chua obtained his doctorate and Masters in City Planning from the University of Pennsylvania, USA. He has a Bachelor of Science (Estate Management) First Class Honours, from the National University of Singapore.