



**Singapore
Food
Agency**

DEVELOPMENT WORKSHOP

Approach for Land-based Farms in Singapore

Workshop Agenda

- A. Re-Introducing Farms to Singapore
 - 1. Why do we need to “Grow Local”?
 - 2. What constitute “Grow Local”?
- B. Regulatory Requirements in setting up Farms in Singapore
 - 1. The Roadmap
 - 2. Key Regulatory Requirements
 - 3. Development Framework
- C. Tendering for a Farm Site
 - 1. Tender Process
 - 2. Example of a land-based farm
- D. Agri-food Cluster Transformation (ACT) Fund
- E. Question & Answers

A. Re-Introducing Farms to Singapore

Why do we need to “Grow Local”?

- VIDEO drive.google.com

What constitutes “Grow Local”?

1. To build our agri-food industry’s capability and capacity to produce 30% of our nutritional needs locally and sustainably by 2030
2. With just 1% of Singapore’s land set aside for agriculture, emerging technologies allows the development of highly-productive and sustainable farms
3. The targeted produce -

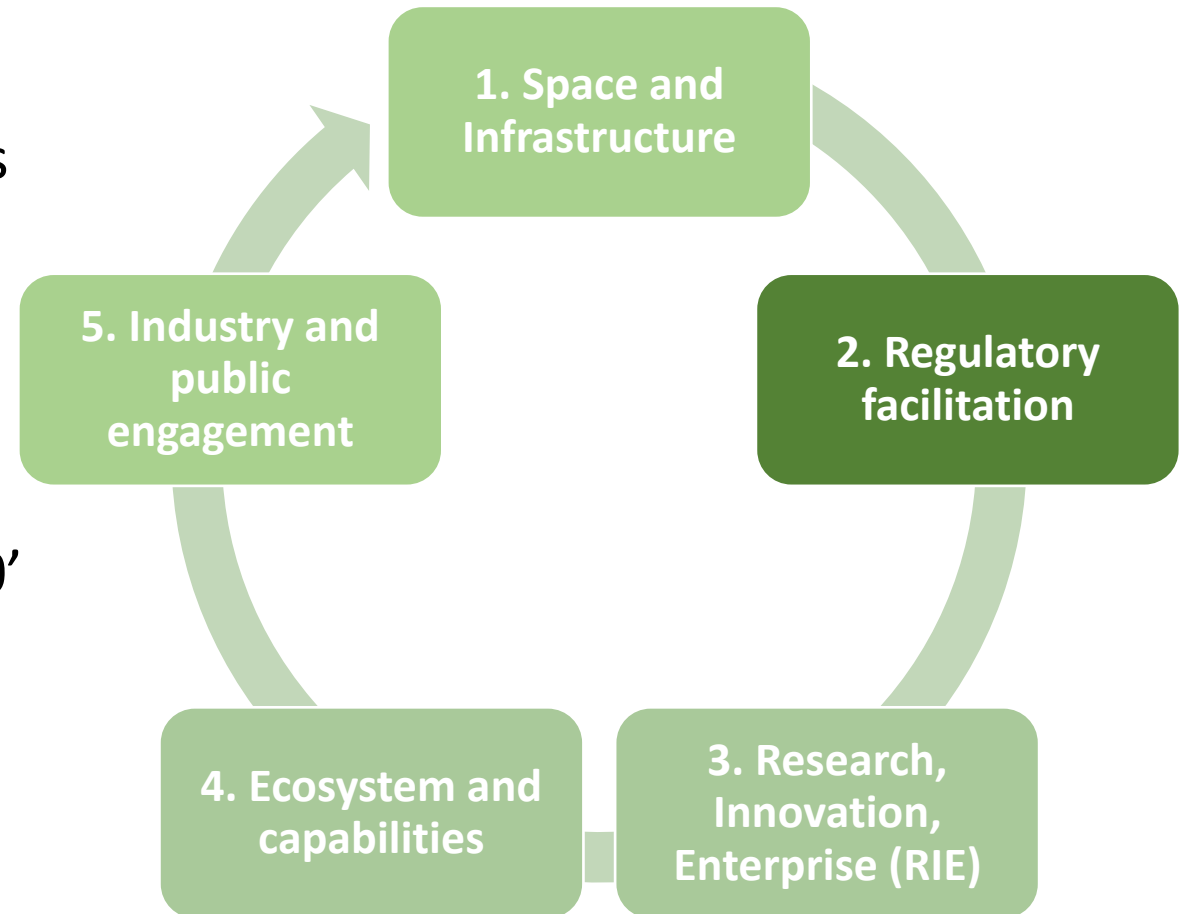
Vegetables
(leafy veg, fruited veg,
mushrooms,
beansprouts)

Seafood
(fish, crustaceans)

Other proteins
(hen eggs)

What constitutes “Grow Local”?

1. 5 strategies to guide and transform the agri-food sector towards the ‘30 by 30’ vision, and support the growth of farms in Singapore.
2. These strategies show how each stakeholder (farms, agencies, research scientists, offtakers, etc.) plays an important role in realising our ‘30 by 30’ vision



B. Regulatory Requirements in setting up Farms in Singapore

The Roadmap

- To guide a nascent industry, a “whole-of-government approach” is taken for pillar 2 (Regulatory Facilitation)

SFA is the national authority entrusted with the mission to ensure and secure a resilient supply of safe food from farm-to-fork for Singapore.

Regulations Workgroup (RWG) co-chaired by SFA and Enterprise SG and are represented by members from BCA, EDB, IRAS, JTC, LTA, NEA, NParks, PUB, SCDF, SLA & URA:

- Guide agencies in reviewing policies that impede farm development
- Multi-agency consultation sessions prior to farm construction

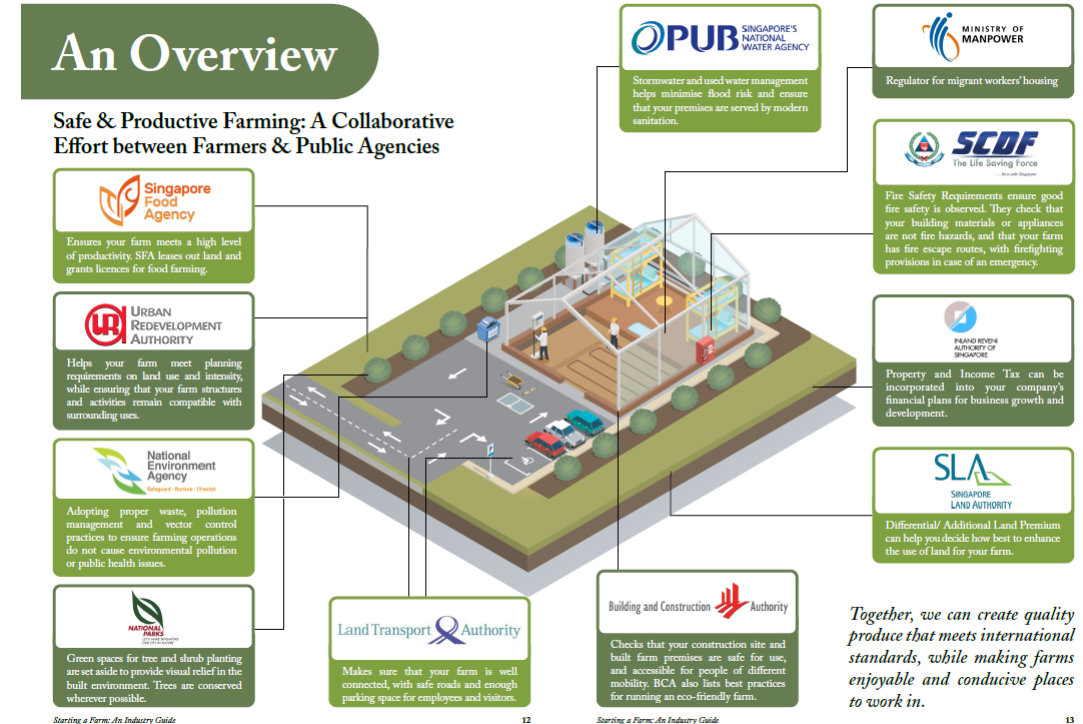
EDB is the lead government agency that plans and executes economic and industrial development strategies for Singapore, supporting overseas companies to set up in Singapore.



B. Regulatory Requirements in setting up Farms in Singapore

The Roadmap - Key Regulatory Requirements

1. The **Industry Guide Version 2** consolidated key government regulations on setting up a farm in Singapore.
2. Farm to consider requirement as it may affect the farm design, cost and construction timeframe
3. Farms shall appoint a **Qualified Person (QP)**

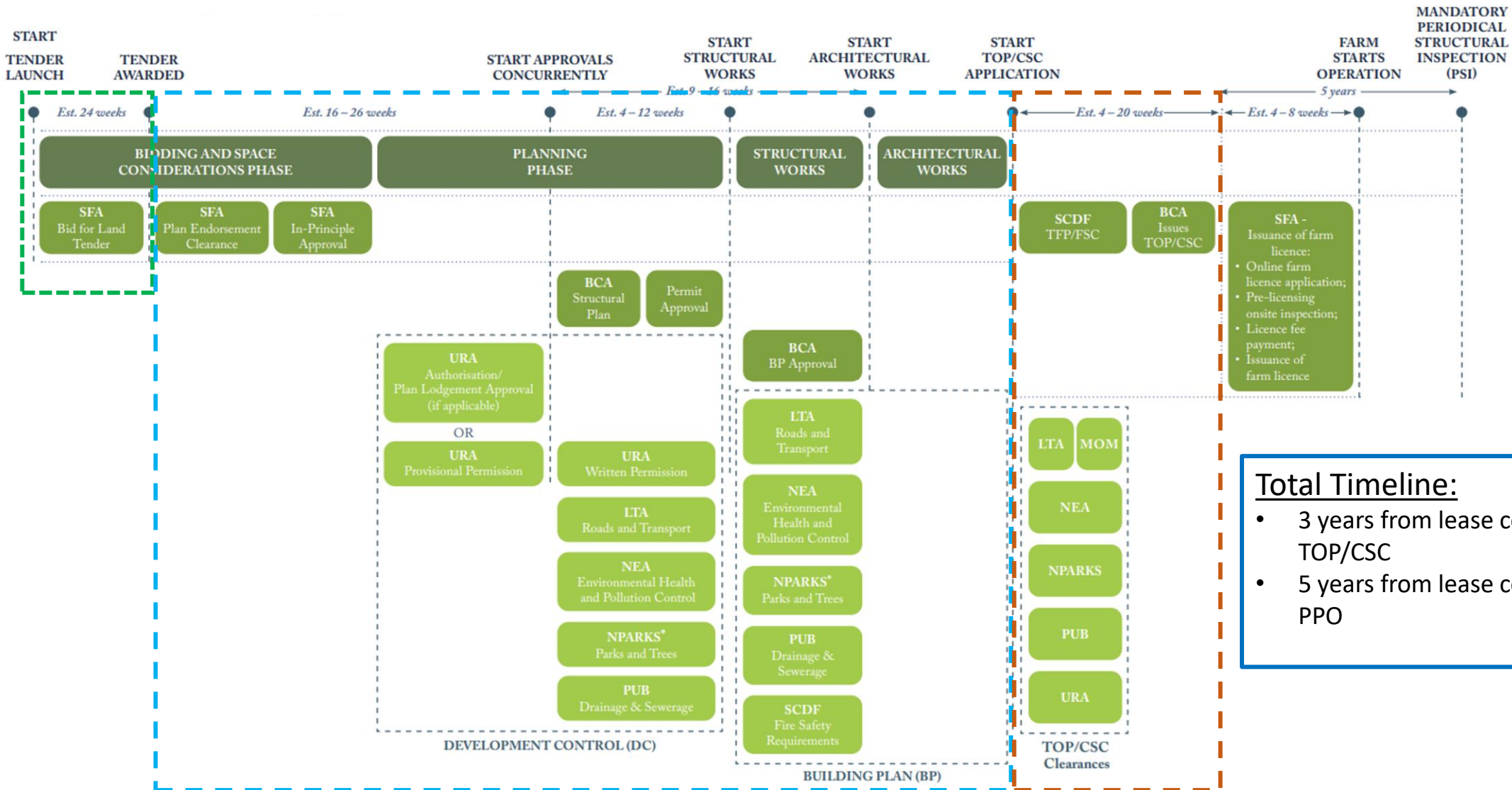


Scan here for the Industry Guide:



B. Regulatory Requirements in setting up Farms in Singapore

The Roadmap – Development Framework



Total Timeline:

- 3 years from lease commencement to obtain TOP/CSC
- 5 years from lease commencement to meet PPO

The Roadmap – Land Use Policy

- At least **90% of Land Area** (i.e. excludes NParks' green buffer and peripheral planting verge requirement) shall be used for production (e.g. greenhouse, Facility for packing, sorting, quarantine, disease treatment, storage, loading/unloading bay, bin centre, tanks, R&D, waste(water) treatment facility, biogas & solar energy harvesting, post-harvest processing facility).
- The **max outdoor & indoor floor areas for ancillary should not exceed 10%** of Land Area (e.g. Staff Accommodation/Workers Dormitory (inclusive of toilet/resting/kitchen/pantry areas)/Office/Car Parking) used solely for supporting the development and farming on the Land.)

The Farmer shall seek prior written consent of SFA and the relevant authorities for the proposed production, production-related and ancillary uses.

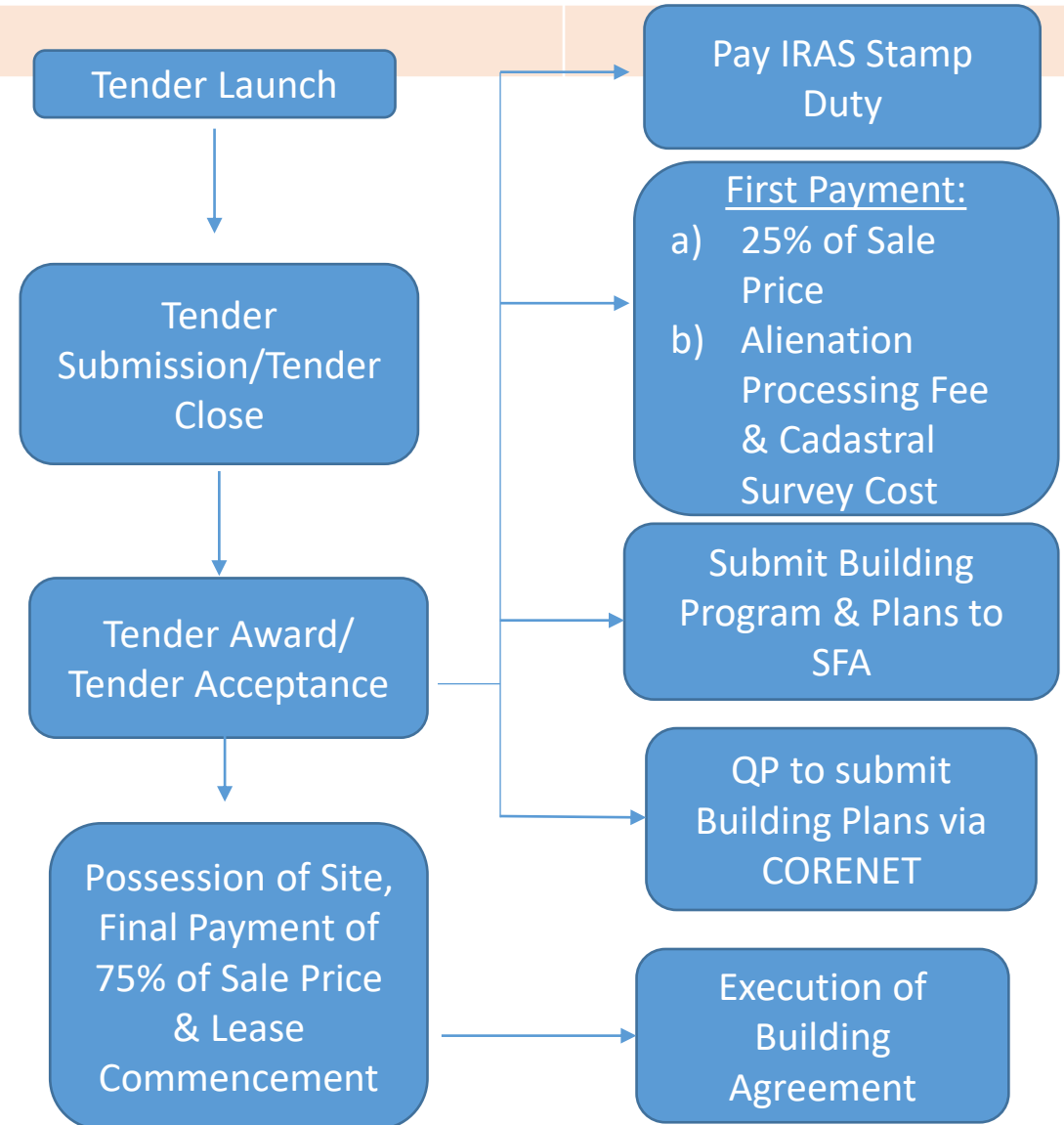
Other Ancillary Uses [^]	Max Area
Snack Bar, café, restaurant, includes outdoor refreshment area, retail outlets - For sale of farm and non-farm products, e.g. souvenirs	200 sqm
Visitor Centre - For use as a museum or education centre to showcase farm related exhibits, local history, etc.	200 sqm

[^]Any proposal for other ancillary uses is subject to the approval of SFA and the relevant authorities. Land betterment charge/additional land premium, where payable, will be levied. SFA's endorsement and planning approval by URA is required

Tender Process

Stage 1

- Bid for the land tender**
 - Tender proposal- Production Capability, Track Record and Business Sustainability
 - i) **Fixed price**, ii) **Concept and price Tenders**
 - Document required
 - Tender proposal form,
 - Tender Deposit,
 - Declaration of Government Equity Participation,
 - Supporting document,
 - form of tender
- SFA Plan Endorsement Committee (PEC) approves **Building Plan**
 - Submit building plans via CORENET for SFA and Technical Agencies' (TA) endorsement
- SFA **In-Principle Approval (IPA)** for farming activity



Development Control

Stage 2

URA

1. Planning Guidelines

- **Building Setbacks** from road (i.e. min width of road buffer depending on road categories) and from other boundaries
- Building Height – site specific as indicated in the tenancy agreement / technical conditions of tender
- Allowable **Ancillary** Uses and Gross Floor Area GFA quantum as indicated in the tenancy agreement / technical conditions of tender
- **Earth Works** (requires clearance from the lessor, SLA, & PUB)
- **Boundary and retaining wall** (<1.8m)

2. Planning Permission

Majority of Agriculture proposals should not require submission to URA (i.e. Authorisation) or can enjoy instant approval (Plan Lodgement). Minority of proposals will require a development application submission to URA for formal evaluation.

- **Authorisation** - no need to seek approval from URA if conditions/qualifying criteria are met
- **Plan Lodgement** - QP lodges plans with URA and declares compliance with lodgement criteria
- **Development Application** – QP submits a development application to URA to obtain Written Permission (WP)

Development Control

Stage 2

Development Control (DC)

LTA

1. Suitability of access points
2. Frontage improvement to support proposed development
3. Improvement need to existing traffic scheme
4. Provision of parking lot is exempted for farm development

Development Control

Stage 2

Development Control (DC)

NEA

1. **Environmental Information (EI)** to be submitted as well as Application for Workers Dormitory (if applicable)
 - Building height constraint, health and safety buffer
2. **Environment health**
 - Tabulation of total daily refuse output of development and management of refuse.
 - Rainwater Harvesting, roof gutter, rainwater outlet, down pipes, scupper drain accessibility, etc
3. **Pollutant control**
 - Best Management Practices for agricultural activities (E.g. Management of wastewater and trade effluent discharge, composting, containment facilities for storage of liquid chemicals and wastewater)
 - Operation of pollution control equipment (e.g. Boilers, anaerobic digestors, gasification plants etc.)

Development Control

Stage 2

Development Control (DC)

PUB

1. Drainage

- Flood Protection Measures -Minimum Platform Level (MPL)
- Internal drainage Scheme (including source control measures)
- Best Management Practice: Treatment Pond

2. Sanitary and Sewerage

- Connection to public sewer
- Sewer setback
- Prevention of used water backflow

Development Control

Stage 2

Development Control (DC)

NParks

1. Green Buffer

- A 3.0m or 5.0m wide green buffer should be provided along the sides of boundary that front a public road, in accordance with the road category

2. Peripheral Planting Verge

- A 2.0m peripheral planting verge should be provided along other sides of boundary not fronting a public road and not adjoining another agriculture development

3. Open Air Parking Areas

- Planting areas for open air parking areas at street level should be provided

4. Tree Conservation

- Trees above 1.0m girth should be conserved, where possible

Building Plans

Stage 3

Following **Building Plans (BP)** are required to be submitted to the respective agencies¹:

1. BCA : Building Plans with URA Written Permission/Lodgement Approval
2. SCDF Building Plans, Fire protection and Mechanical ventilation plans.
3. LTA : Street Plan
4. NEA : Environment health and pollutant control
5. PUB: Drainage, water and sewerage connection plan

Note:

¹ From 1 September 2020 onwards, for all new development projects, **BP submissions to NParks are not required**. All greenery provision, tree felling request and reinstatement works within road reserve will be assessed and approved at the DC stage.

Temporary Occupied Permit (TOP)/ Certificate of Statutory Completion (CSC)

Final Stage

1. To obtain **final BCA TOP/CSC**:
 - Agencies' **TOP/CSC** (URA, LTA, NEA, NParks & PUB),
 - SCDF's **Temporary Fire Permit (TFP)/ Fire Safety Certificate (FSC)** clearance from SCDF.
2. Additional requirement upon completion of building
 - MOM- Foreign Employee Dormitories Act (FEDA) Licence
 - Apply for SFA farm licences

	Fee for consideration
1	Consultation Fee
2	Authorities & Connection Fee
3	Construction Preliminaries Works
4	Breakdown of pricing Construction Works
5	Mechanical & Electrical Works
6	Equipment Cost

**Please note that the timeline does not include construction stage*

D. ACT Fund

Agri-food Cluster Transformation (ACT) Fund

(Available from 30 April 2021 to 31 December 2025 for local farms)



The **Agri-food Cluster Transformation (ACT) Fund** supports the transformation of the agri-food sector into one that is highly productive, climate-resilient and resource-efficient. The ACT Fund comprises three co-funding components:

Funding Component	Funding Description	Funding Quantum
Capability Upgrading (CU) component	Supports farms on purchase of equipment and systems from SFA's pre-qualified list, conduct small-scale pilot trials to raise productivity and resource-efficiency, and reduce pollution and waste.	Co-funding at 70% up to \$100,000
Innovation & Test-bedding (I&T) component	<p>'Innovation' component - Supports farms' investment in Proof-of-Value project or develop innovative farming technology / systems that directly improve farms' productivity, sustainability and circularity of resource use, within an implementation window of up to two years.</p> <p>'Test-bedding' component – Supports farms' investments in piloting or adapting farming technology / system that may have worked in other countries but have yet to be proven in Singapore's context, environmental or weather conditions, to increase farm productivity in a resource-efficient manner with minimal pollution and waste.</p>	<p><u>'Innovation' Projects</u> Co-funding at 70% up to \$1mil cap</p> <p><u>'Test-bedding' Projects</u> Co-funding at 70% up to \$700,000 cap</p>
Technology Upscaling (TU) component	<p>Supports the purchase of large commercial-scale, automated, and advanced farming technology solutions^[1] that will be integrated with agri-input production, post-harvest and waste treatment technology to achieve higher levels of productivity in a resource-efficient manner with minimal pollution and waste.</p> <p>Farms that are setting up new farm sites or retrofitting indoor spaces within ready industrial spaces for farming can also tap on the fund for a one-off support to defray infrastructure and building costs that will be incurred to install the farming technology and system funded under this scheme.</p>	<p>Co-funding at 70% up to \$6mil cap</p> <ul style="list-style-type: none"> - Up to \$4.5mil for farming technologies - An additional one-off co-funding of up to \$1.5mil for infra-capital costs

^[1] Benchmarked to local and global best-in-class productivity.

Common Issues Faced by Some of Our Farmers

Planning, Design and Construction phase

- Did not consider for major agencies' requirements (i.e. water detention tank, fire protection system provision, person with disability (PWD) accessibility requirement, etc)
- Lack of funding to begin construction, or continue with construction, as initially did not take into account the cost and spaces required to adhere to agencies regulatory requirements.
- Investor withdrawal after tender award, or no seeding of fund to continue with next phase/plot of development
- Bidding for multiple plots and unable to meet Project Completion Period for all plots
- Lack of manpower or material to start, and or continue construction
- Inexperienced QP which resulted in delay, construction not meeting Agencies requirement (i.e. fire exit)
- Non-credited vendor (i.e. plumber disappeared after collecting deposit/payment)

Operational phase

- Not able to offtake produce (i.e. unable to efficiently sell the vegetable, lack of buyer, mismatch between local demand and locally-farmed produce)
- Waste management issue (i.e. animal waste, vegetable waste)
- Not able to sustain business viability

Tips before Starting a Farm in Singapore



Planning, Design and Construction phase

- New farm need to be aware of **Singapore's economic climate** before tender
- Please read [industry guide](#) which is available on SFA website.
- Please read the **tender documents** once they are made available at tender launch so that you are aware of the terms and conditions of the tender. You are also strongly encouraged to **attend the tender briefing**.
- Engage a **professional team** with proven track record and knowledge of Singapore's regulations including Qualified Person, Quantity Surveyor, M&E, C&S engineers, consultants and contractors to do a feasibility study for **both construction and operational phases including sales plan and waste management plan (including sourcing of vendors & suppliers)** before submission of tender proposal, to ensure you are able to perform the contractual terms.
- Obtain **building plans approval** by agencies before any commencement of works to prevent the need to do corrections later. Designs should factor in all regulatory requirements.
- Prepare **contingency plan** (i.e. extra funding) so project can still proceed even when emergencies arise (i.e. increase in costs, or withdrawal of funding).
- Please note that you are required to complete all the plots within **three years of lease commencement**, so consider whether you have the financial resources to complete multiple plots within the same period of time.

Tips before Starting a Farm in Singapore

Operational phase

- **Property tax:** to note that fixed properties like stationary/bolted farming machinery or systems will be factored into annual value of the farmland after installations of the farm are completed.
- Successful Tenderer will be required to hold more than **50% of shares** of the farm.
- **Products used for farming**, may require approvals/permits by Agencies, (i.e. some fertilisers would need Nparks/SPF's approval, before they can be imported to Singapore).
- **Agri-waste disposal**, which can be a major operating issue, especially mushroom farming. Best is see how can you reduce, re-use or recycle the wastes.
- Have in place **business continuity plans** so business can continue even when emergencies like increase in costs arises.

Example of Land-based Farm – Fruited Veg & Mushroom



Thank
You

URA Lodgment Criteria

The proposal must satisfy the following criteria:

1. Land is leased by the State or a statutory body for Agriculture development* (excludes sites in Agri-Food Innovation Park)
2. Endorsed by the lessor for the land (e.g. SLA, SFA, NParks)
3. Development plot abuts a public road allowing direct vehicular access
4. Does not encroach onto any other land
5. Complies with all [planning guidelines](#)
6. Compliance with the prevailing [building height controls](#)
7. Earthfill works on the land, if any, will not cause the level of any point in the land to be more than 1.5 metres above the lower of the following:
 - (i) the level of that point in the land at the time when the land was leased or agreed to be leased by the State or statutory body; or
 - (ii) the level of any point at the abutting edge of abutting land
8. Does not have any unauthorised works
9. Proposal is submitted by a QP who is a registered Architect, Engineer, or surveyor, appointed by the lessee for proposed works
10. Obtained the consent from owner of the land
11. Obtain clearances from all relevant technical departments directly, including LTA, NParks, FSSD, PUB, NEA, DSTA and BCA

LTA

- Suitability of access point
- Frontage improvement to support proposed development
- Improvement needed to existing traffic schemes
- Provision of parking lots

Property Tax

- Tax on immoveable properties, comprising land, buildings and physical improvements. It is applicable whether the property is rented out, owner-occupied or left vacant.
- Property Tax = Annual Value x Prevailing tax rate at 10% per annum
- Annual Value (AV) is the estimated gross annual rent of your property if it were to be rented out.

Determination of AV

Farm land – This is based on 5% of the estimated freehold market land value¹.

Completed farm property – This is based on 5% of the Freehold value of property (comprising land, buildings, structures and physical installations)

Example:

Estimated freehold land value: \$500,000

Cost of buildings and improvements: \$500,000

Freehold value of property: \$1,000,000

AV: $5\% \times (\$1,000,000) = \$50,000$

Property Tax: $10\% \times \$50,000 = \$5,000$

¹The Market Value of farm land is typically based on market transactions of land for agricultural/farm use. To determine the market value on a freehold basis, the Leasehold Table (as published by the Singapore Land Authority on their website) is used to convert from leasehold land values