



## Present Situation/Problem



## The food we eat

& where it comes from

26% of the eggs we eat

8% of the leafy vegetables we eat

8% of the fish we eat

Although Singapore imports

### Local farms provide the food we eat too

AVA aims to raise Singapore's self-sufficiency levels for eggs, fish and leafy vegetables to 30%, 15% and 10% respectively

#### Relies heavily on imported food

Food security issue



Unable to use urban spaces for farming

## Top 3 overseas sources of vegetables

- #1 Malaysia
- #2 China
- #3 Australia



Top 3 vegetable imports

- #1 Potatoes
- #2 Onions
- #3 Cabbages

## Top 3 overseas sources of fruits

- #1 Malaysia
- #2 China
- #3 US



#### Top 3 fruit imports

- #1 Watermelons
- #2 Bananas
- #3 Oranges



#### **Abandoned underground spaces**

- Forts
- Abandoned railway tracks



95kg vegetable

66kg fruits

33kg chicken

21kg fish

19kg pork

5kg beef

3kg duck 2kg mutton

308 eggs

## Necessary Activities (Proposal)









#### A type of indoor farming

- London: underground farm in disused WWII tunnels
- All year round urban farming unaffected by weather
- Hydroponics system use 70% less water than traditional open-field farming
- Uses lighting and irrigation systems with very little energy required



#### **Abandoned lands in Singapore**

• i.e. Jurong Railway & Fort Serapong

# Necessary Activities (Proposal)





### **Fort Serapong**

Built between the 1870s and 1890s, Fort Serapongia is an i ntegrated part of the British's southern coastal defence at Pulau Blakang Mati

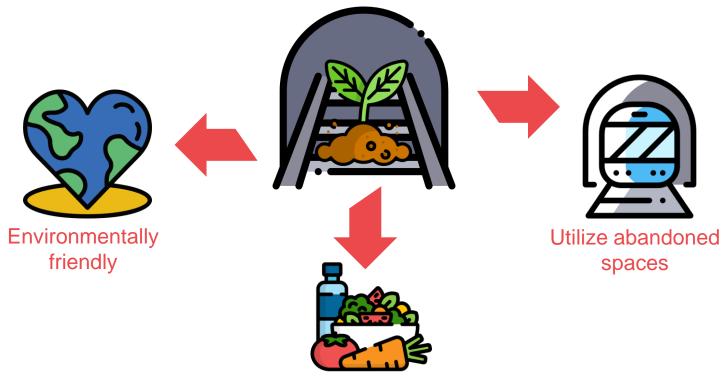
### **Jurong Railway Line**

Used in the 1970s for the transportation of raw materials from Peninsular Malaysia into Jurong, as well as exports of products to the rest of the world



## **Expected Outcome**





Enhanced food security

