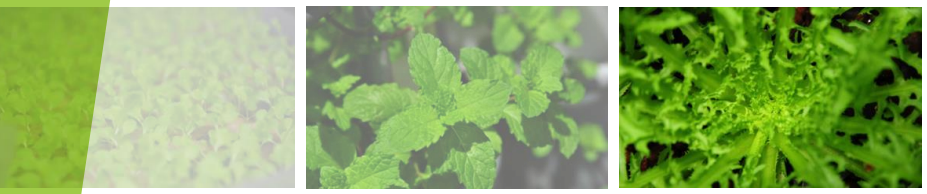

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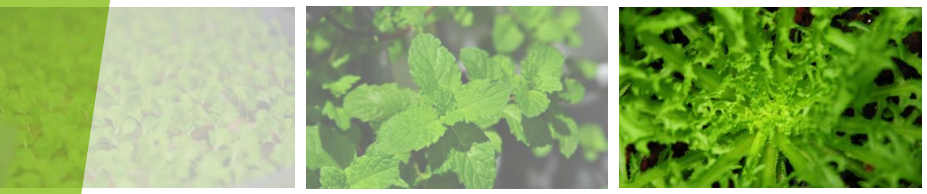
Feeding cities using High Tech Rooftop Farming



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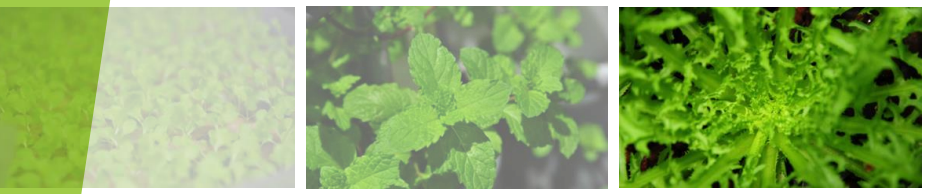
Our Vision

Creating a positive change to society through sustainable urban agriculture



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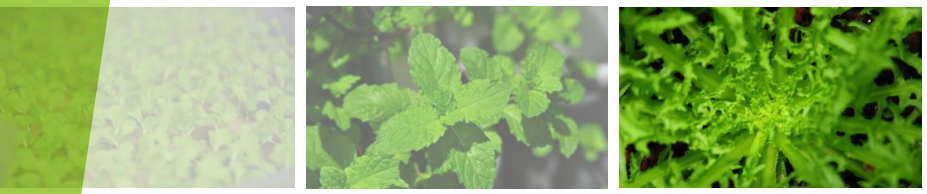
Our Mission

To be a global agriculture company through building and operating local farms amongst the cities of the world



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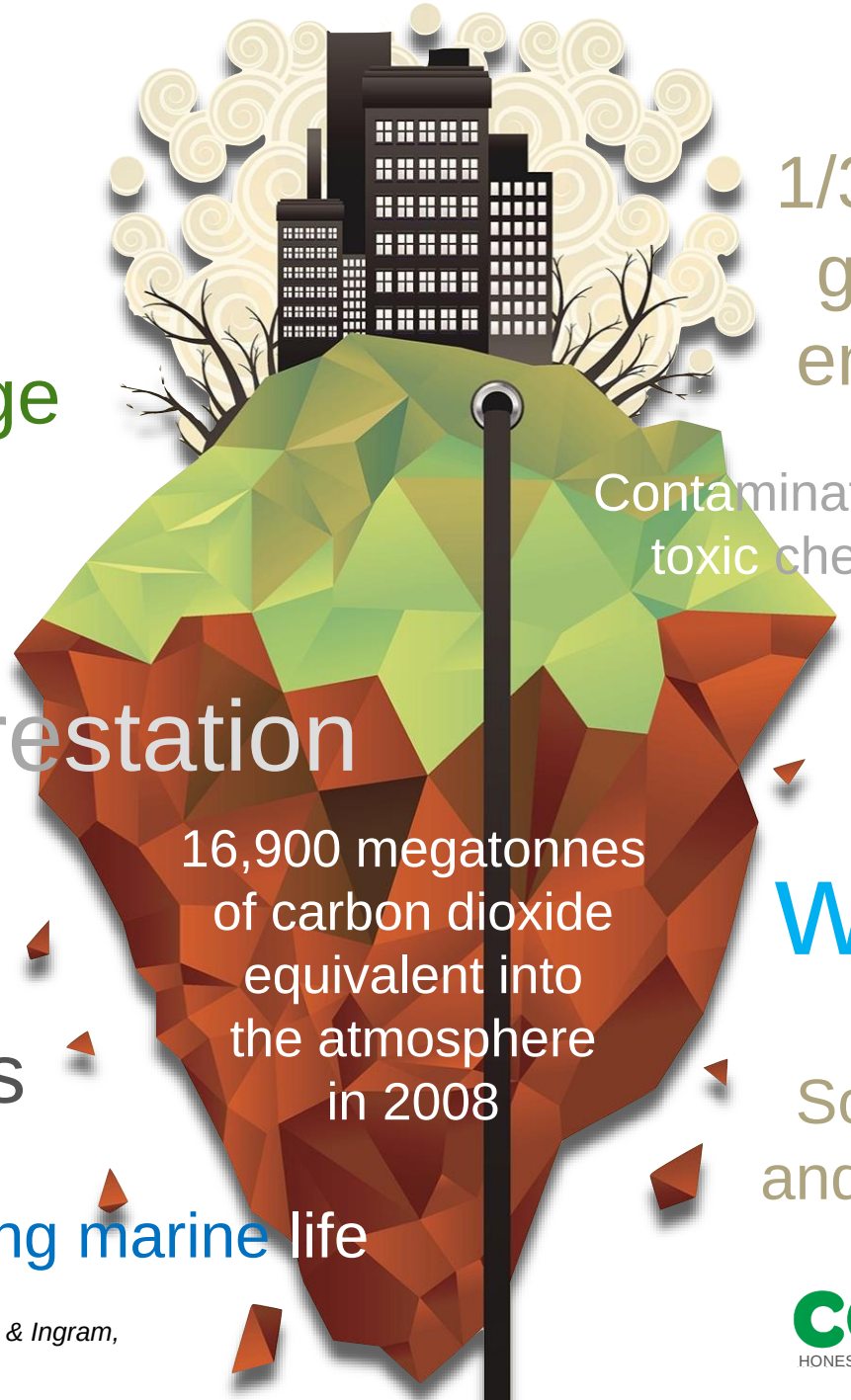
Our Principles

- ***Grow*** great tasting premium nutritious vegetables.
- **Support** communities through job creation, training & education
- **Maintain** a Socially & Environmentally sustainable business.

Feeding our growing cities traditionally comes at a huge cost to the environment



1/3 global greenhouse gas emissions

Contamination by toxic chemicals

70% of global fresh water use

Deforestation

Displacement of indigenous people

16,900 megatonnes of carbon dioxide equivalent into the atmosphere in 2008

Habitat loss

Soil degradation and loss

Soil runoff impacting marine life

Source: Vermeulen, S. J., Campbell, B. M. & Ingram, J. S. I. Annu. Rev. Environ. Resour.

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ST FILE PHOTO

PUBLISHED JAN 16, 2018, 5:00 AM SGT

Disruption and shortage of vegetable supply will continue to drive price of vegetables up

Wholesalers absorbing extra costs, seeking new supply as bad weather creates shortage

Raffaella Nathan Charles

Imported fruit and vegetable prices have gone up, but many wholesalers say they are not passing on the costs to consumers - not yet anyway.

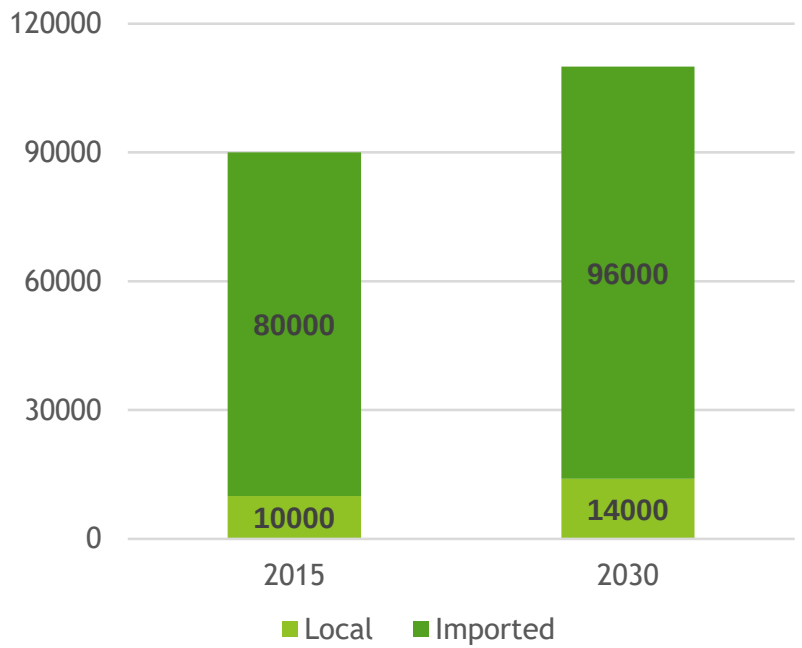
The wet weather and flooding in recent weeks are to blame.

Mr Vincent Lee, vice-president of the Singapore Fruits and Vegetables Importers and Exporters Association, said too much water and too little sun have led to a 40 per cent drop in local green vegetables such as chye sim, spinach and xiao bai cai. There is also a shortage of cucumbers, long beans, green beans and bitter gourd from Malaysia because of floods there.

Like other dense cities, Singapore has a growing unmet demand for fresh produce…

Singapore projected leafy green demand

Tons



A sustainable city needs a sustainable food supply

- **Food security for Singapore**
  - A growing demand for leafy green of 110,000 Tons in 2030
  - 90% of current produce is imported
- **High cost of transporting food to urban centers**
  - Financial cost of cold chain logistics and air-flown vegetables
  - High carbon footprint of transporting our food

Lettuces in Singapore flown from USA

Source: Desk research, Straits Times, AVA data, and team analysis

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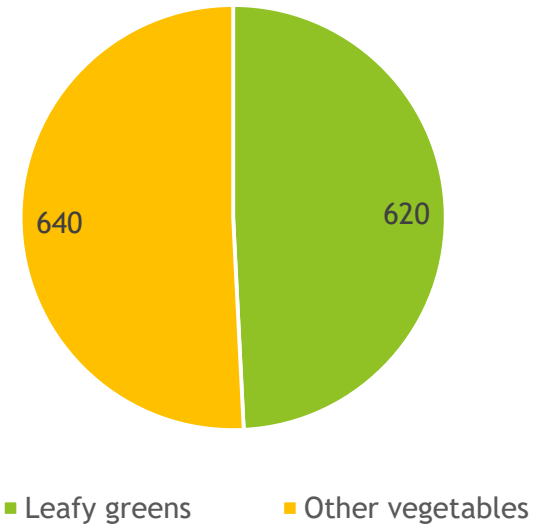
…that translates into a significant market opportunity of SGD 620 million in leafy greens today

The market vegetables in Singapore is sizeable, and leafy greens make up a big chunk

SGD Million

Estimated Market Size 2015 is SGD 1.26 Billion



Customers are dissatisfied with the current offering which is low quality, lacks traceability and is costly

By the time the herbs get here, they don't have any flavor. I've found lettuce already rotting and I have to throw out on delivery

- Martin Satow, Head Chef Grand Hyatt

I no longer buy vegetables from China because I'm afraid of the chemicals that they may have used on the farms

- Anonymous shopper, from B2C survey

Vegetables are much more expensive here because you have to build the logistics cost in, and about 30-50% food wastage in fresh produce

- Zhuang, Agora Produce Distributor

Source: AVA data, Comcrop market research, customer interviews and surveys

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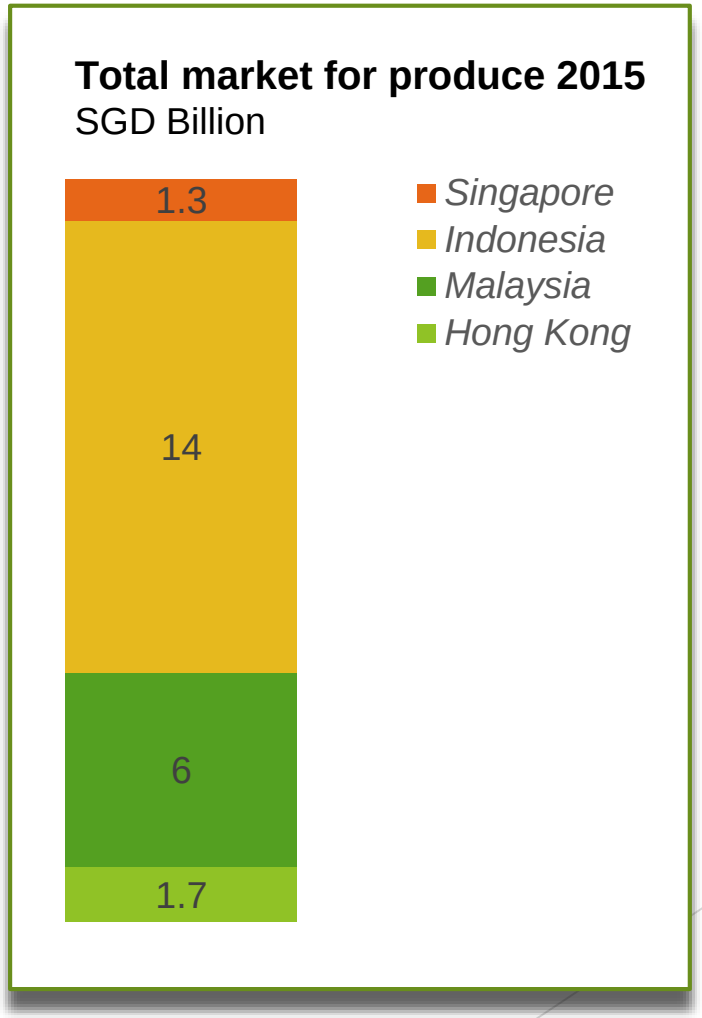
The opportunity is SGD 23 Billion when we look to regional cities

- As countries in ASEAN grow wealthier, **diets are diversifying** to meat, dairy, fresh fruits and vegetables away from rice
  - **INDONESIA** Demand for fresh veggies went up by 230% but production only increased 90% by 2050, SGD 15 Billion vegetable imports projected
  - **MALAYSIA** Currently imports 62% of vegetables eaten and this amount is growing, with local production stagnant
  - **HONG KONG** Similar to Singapore has insufficient land to grow, imports nearly all of its produce
- **Focusing on leafy green vegetables, we project our immediate addressable market in these countries to be ~SGD 3 Billion**



Source: Indonesia Statistics Bureau, FAO Statistical Yearbook 2015, Malaysian National Committee of ICID, Malaysian Statistics Department and Custom's import statistic

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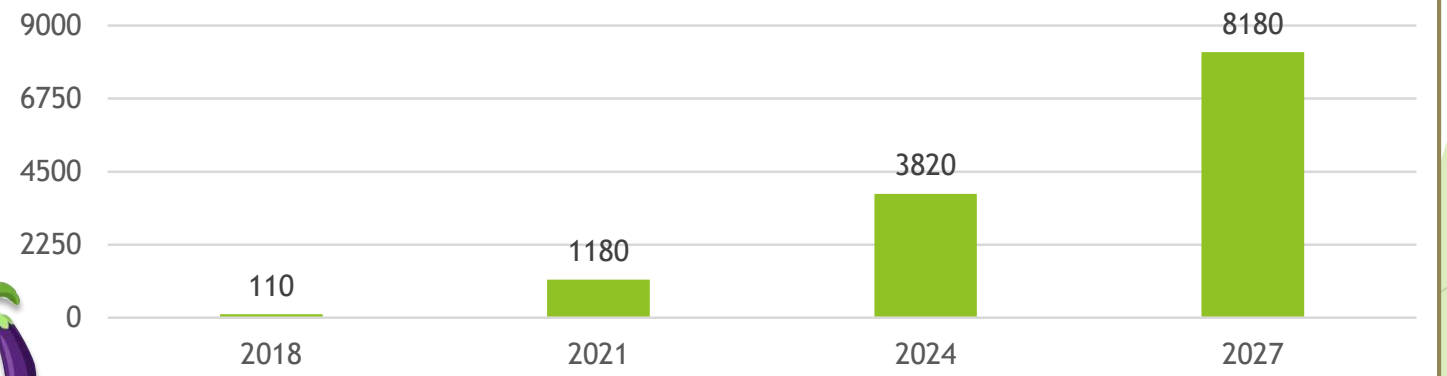
Comcrop will create a new local source for fresh produce through high tech farming in the city

Comcrop will own and operate a network of technology intensive greenhouses using marginalized space in cities

- **Using cutting edge hydroponic growing technology** This will allow us to get yields 20-30 times of conventional farms (~500T/Ha for lettuces)
- **Cutting down cost of transport and waste** Allow us to price competitively
- **Using marginalized space such as rooftops** We are currently getting deeply discounted rental agreements costing us less than farmland and not using any new land

Comcrop leafy green production by year in Singapore, Tons



Source: Team analysis based on projection of number of farms, yield results from existing Sumitomo Thompson site test farm

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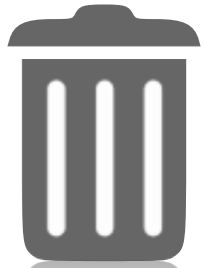
Our new approach to farming reduces resource pressure on our planet and produces less waste

No toxins used – no pesticides and herbicides, either put into our environment or our food

Growing locally means **less fossil fuels burned** in transporting the food to the city

20 times less land used so less destruction of our natural spaces and habitats for farmland; no soil erosion or degradation



Reducing waste from farm to wholesale that is typically 50% of fresh leafy green to 10%, Reduce waste at retail to customer because more inventory “stored” on farm, and longer shelf life of fresher produce

70 times less water used than conventional farming, conserving our fresh water for tomorrow

Cooling effect on rooftop farms lowers temperature of buildings, meaning less power used for air conditioning

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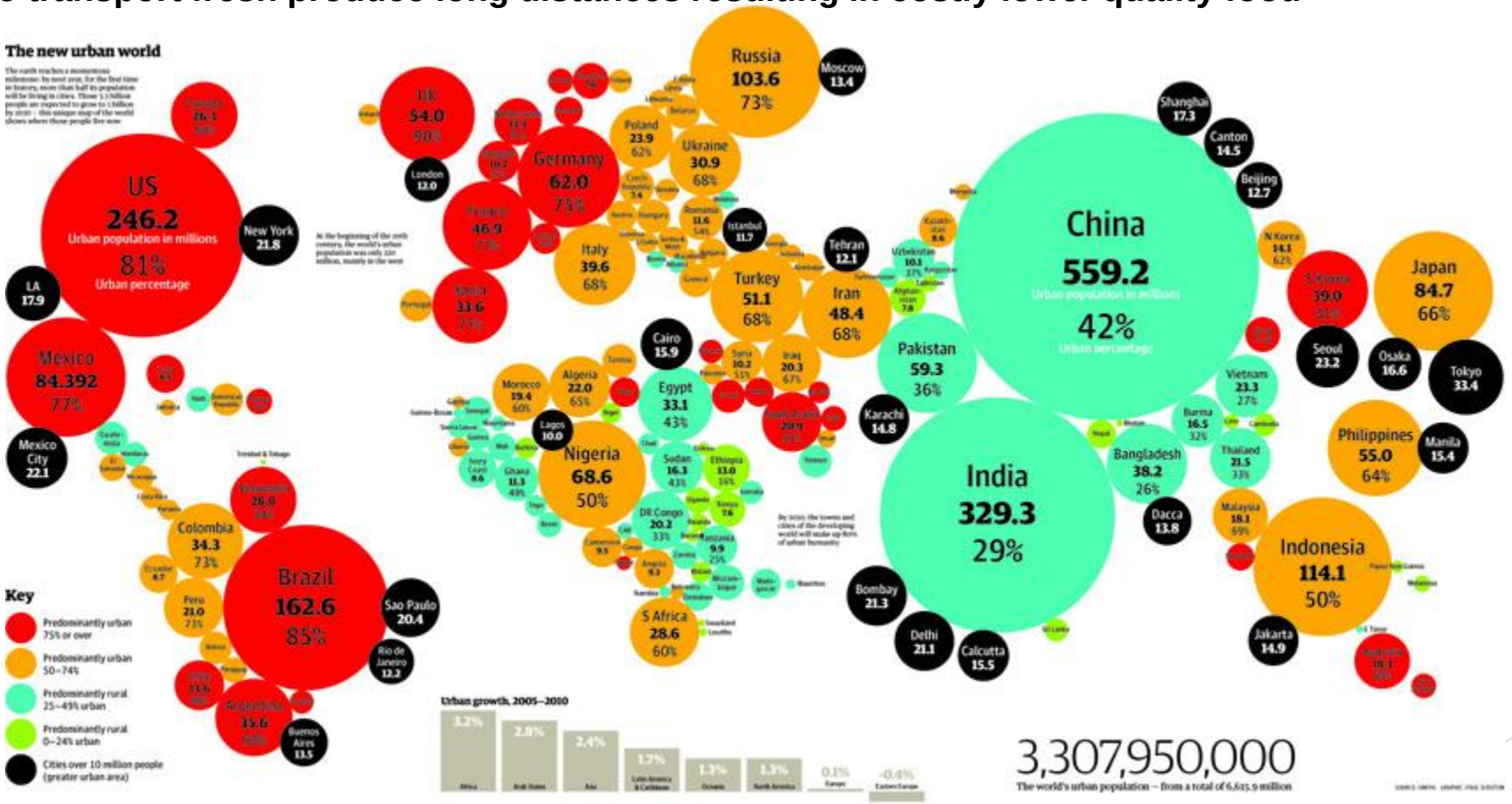
If we get this right, the model can be applied as a source of fresh produce for every urban center

54% of the world's population live in cities, projected to 70% by 2050 – many of these cities have to transport fresh produce long distances resulting in costly lower quality food



Source: UNFP

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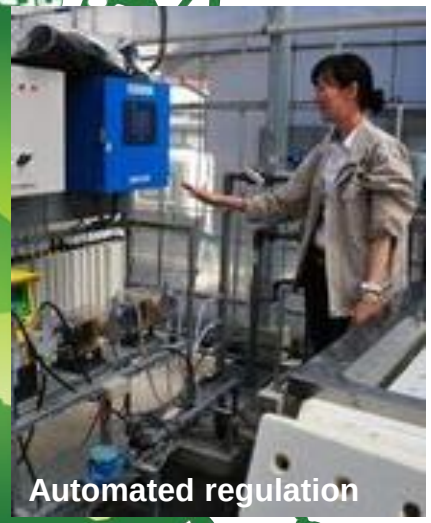
Combining multiple technologies will allow us to produce yields at least 20x conventional farms

Hydroponic Greenhouse testbed in Singapore



Automated regulation

Example rooftop greenhouse

Source: Urban farm interviews, desk research

Technology

- Combining hydroponic growing with sensors to measure nutrients and control climate, and software to feedback data allows us to create ideal conditions for plants
  - **IoT and sensors** to regulate climate, nutrients through automated response
  - **Controlled greenhouses** means high yields even without pesticide use
  - **Software** for ease of farm manager decision-making and action
- This method can 30x farm **yield due to shorter plant cycles year-round** and efficiency of meeting plant needs

Why rooftop?

- **Lower investment cost** and less energy, water, rental costs than indoor farming
- Existing **commercially successful** farms using this model

GOTHAM GREENS LOCAL PRODUCE

BRIGHT FARMS

SKY VEGETABLES

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We will focus on being growers of higher quality produce priced competitively with a trusted brand

Our model

Grow, pack, distribute

Multiple grocers/ Salad chain central kitchen

- We grow fresher and more nutritious greens, as it is harvested on the same day (better taste, texture and shelf-life)
- Pre-washed and cut, very easy to eat ("ready to eat")
- Pesticide-free from trusted local farm - traceable
- Agnostic to type of technology, as long as it is highest productivity to give largest quantity of highest quality vegetables – continuous improvement here

Our distribution

- Ramp up sales to current customers: organic grocers and salad retailers
- Mainstream grocery chains will be added to the mix when hit critical mass
- Hear a high level interest from our current (Salad Stop) and future customers (Redmart)
- Deliver using cold truck on same day as harvest to customer

redmart™

Food Xervices

FairPrice

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Comcrop has 3 main competitive advantages

Unique Knowledge Of Urban Farming

- 4 years operational experience in Southeast Asia; first ones to do this
- Understand specifics of engineering outdoor rooftop farms, unique to us
- Have proprietary farm management systems and tailored protocols applicable to leafy greens and vegetables in our climate, for each stage of growth cycle

Right Partners / Public Sector Support

- We understand the lengthy regulatory processes required for such farms which would take new entrants years to navigate
- We have set up the right ecosystem of partners (8+ agencies) in Singapore to support our growth

Trusted Brand

- We've created a trusted premium, brand that is difficult to replicate
- We have a head start being the first with this idea to capture the consumer's imagination
- Being homegrown in Singapore has positive halo affects in Asia
- Already sold at top retailers and F&B outlets

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Comcrop has been running Southeast Asia's first rooftop farm for the last 2 years

- Successfully operating rooftop farm (~6000 sqft) on top of SCAPE
- Profitable as of June 2016

- Currently supplying to Singapore restaurants and online customers.

HYATT HOTELS & RESORTS

28 HONGKONG STREET

chalia RESTAURANT

Media mentions:

THE STRAITS TIMES

联合早报 Lianhe Zaobao

Discovery CHANNEL

Farming's Future BAYER

WINE&DINE

TASTE LESEXPLORATEURSDUGOUT HUNTERS

MONOCLE PRESTIGE

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We have the right relationships to manage the complexity of the projects

Key Stakeholders And Partners

jtc
Breaking New Ground

AVA

MND SINGAPORE

SJ building cities shaping lives

Community Trusts and Supports Us

- Singapore knows us!
- We engage with our community every week
- We have trained and set up protocol for MINDS to germinate our seeds, and our harvesting is done by senior citizens

Knowledgeable Team That Has Stuck With Us

- Our team is passionate about our mission and knowledgeable about farming – the go the extra mile to manage a successful farm and have spent more than 3 years doing so with us at SCAPE

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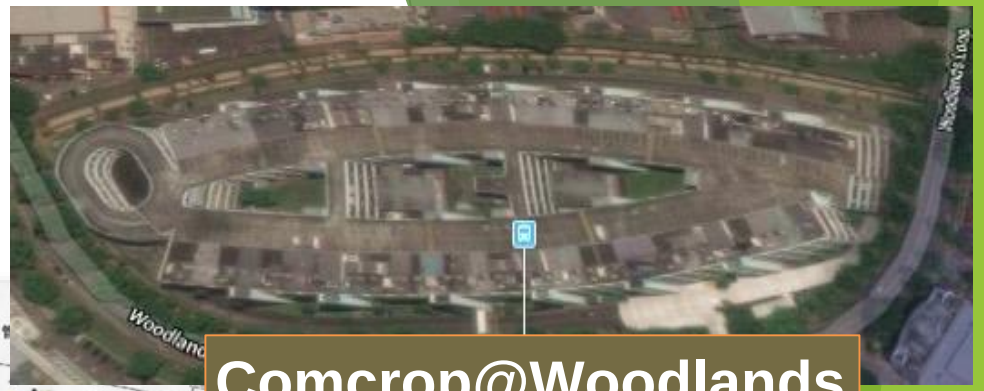
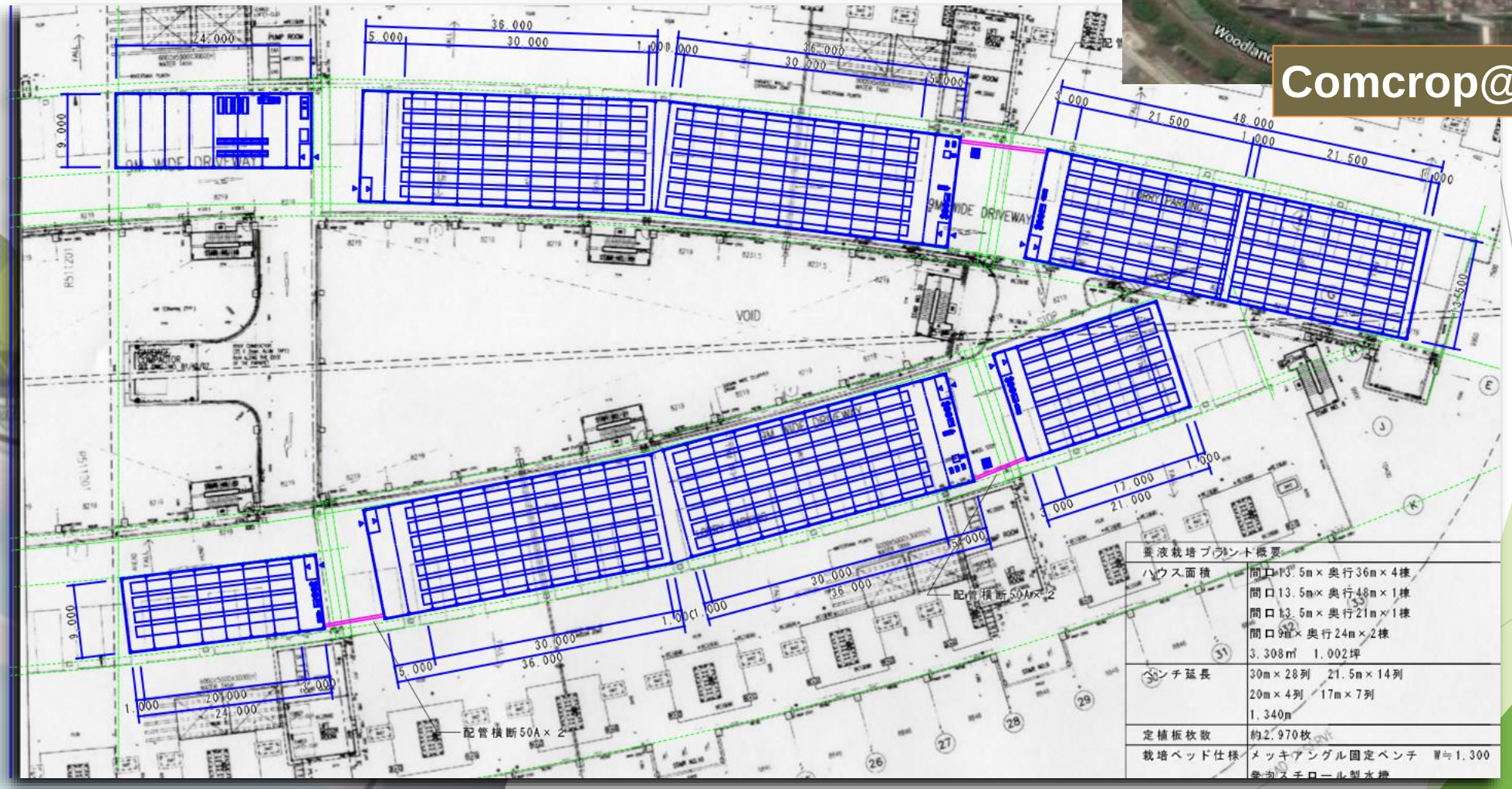
Comcrop @ Woodlands

Phase One = 8 Greenhouses, 35,000 Sqft.





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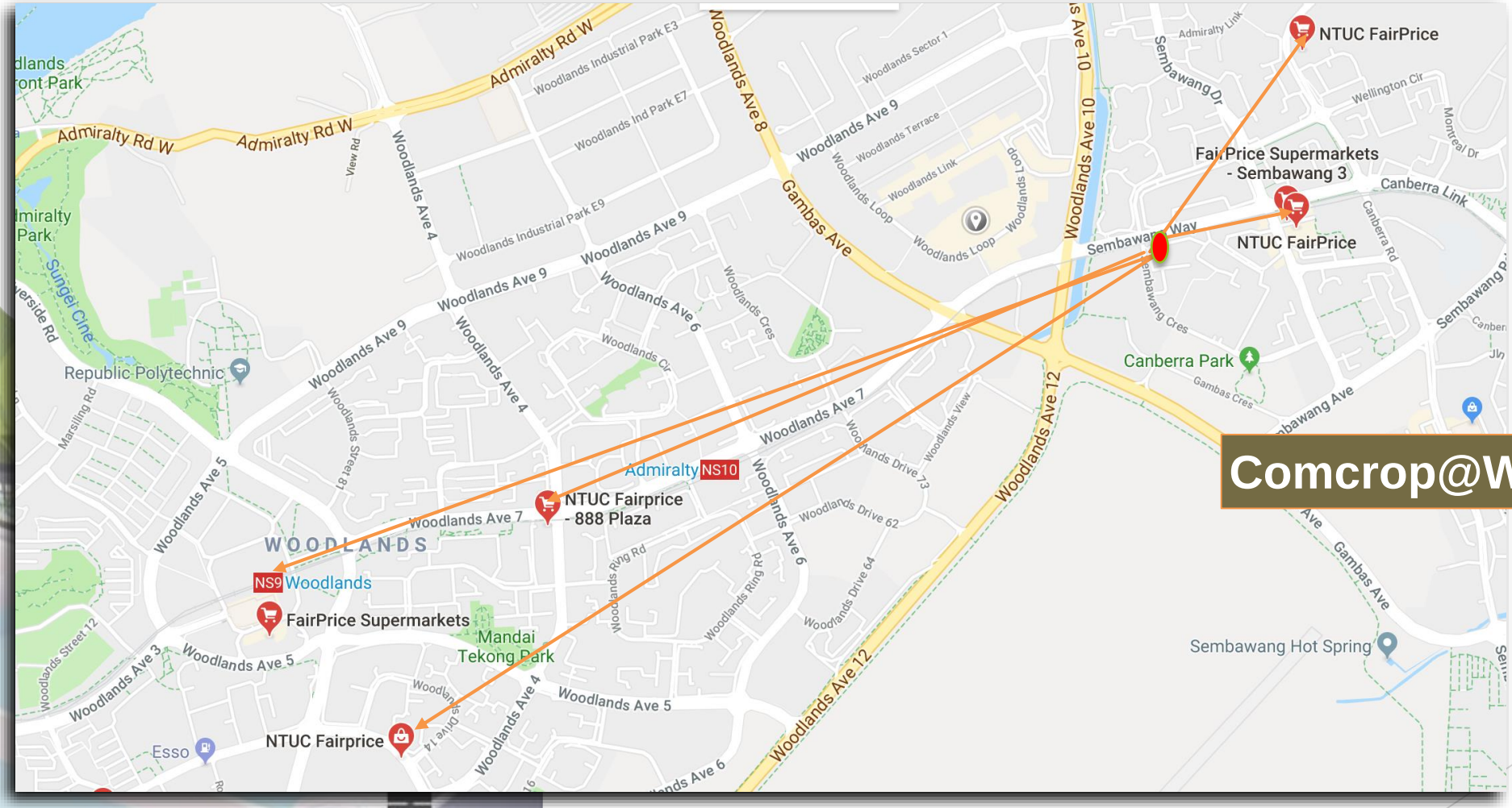
Geographic Advantage (time to market)



- Maximum travelling time 10 minutes = fresher produce with longer shelf-life
- Logistic transport cost is much lower

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Geographic Advantage (Part time worker)

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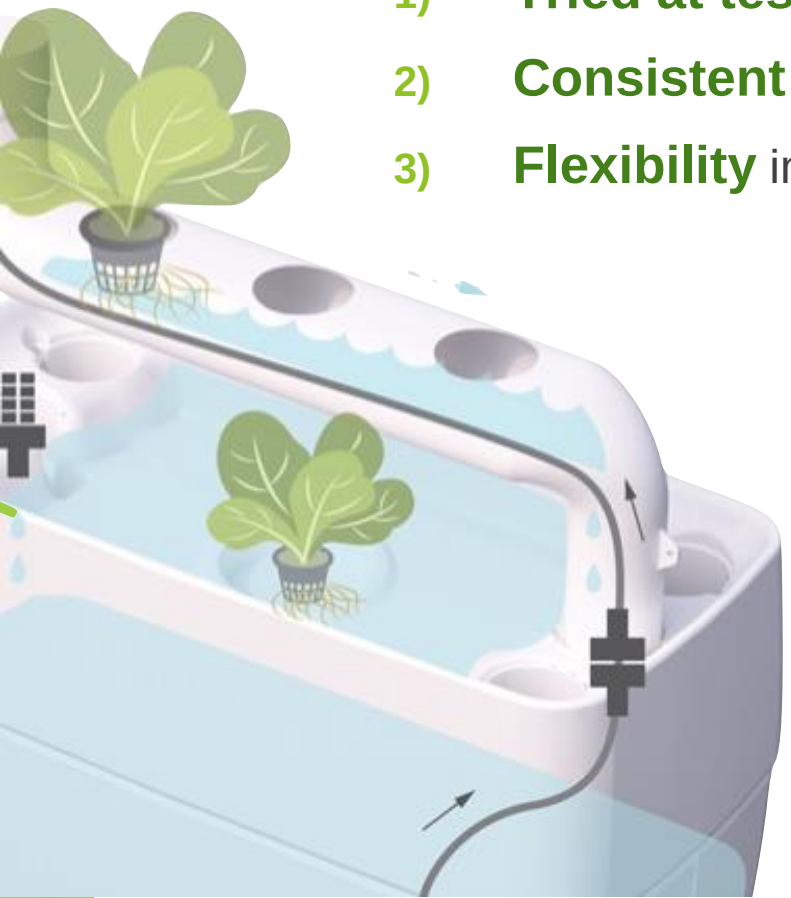
Technological Advantage

Using DWC or NFT systems (Hydroponics)

1) **Tried at tested** by many countries including Japan, Netherlands & USA
2) **Consistent Yield** with precision control of growing environment
3) **Flexibility** in growing crops to response to market demand



Note:

DWC (Deep Water Culture System) ,
NFT – (Nutrient Film Technique) are the most common hydroponic technology in market

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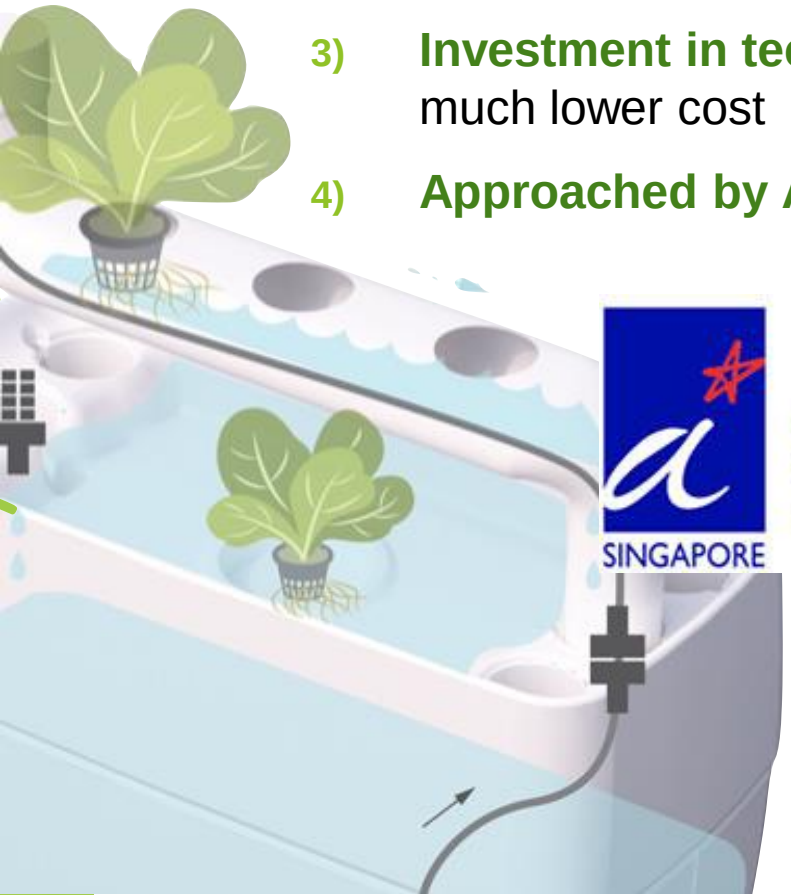
Comcrop's Competitive Advantage

1) **Committed farmlands** of up to 2 ha by end 2018 and further 8 ha in development pending successful implementation of Woodlands pilot farm.
2) **Continuous development of a vast library of plant Protocol (Recipe) –** Currently developed protocol for 10 locally demanded premium vegetables
3) **Investment in tech –** prototyping autonomous AI dosing units for better control at much lower cost
4) **Approached by A*star** to develop agri 4.0 roadmap for our future farms



Agency for Science, Technology and Research
SINGAPORE

A-star will work with us to develop enabling technologies to control and manage all our farms - primary on cultivation so that we will have optimum harvest and consistency

We will own the IP to cultivation - including the technologies we developed with A*star and also the cultivation IP which we will develop ourselves

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