



Building a  
sustainable future

















*Growing 1,000 Sq.Mt Indoor farming*

*Privileged and Confidential*





# Hydroponics & Vertical Farming have High Capex, Energy costs an impediment to scaling

Benefits	Conventional farms	Greenhouse	Hydroponic farms
 Water usage per kg	 100 liters	 50 liter	 5 liter
 Crop yield per ft <sup>2</sup>	 1 kg	 2 kg	 20-100 kg
 Average transportation distance	 1,000+ kms	 250-500 kms	 Within 50 kms
 Proportional current cost of production and transportation	 ~5x	 ~4x	 ~1x

...But we have solved it.

- **Higher Capex**

Our farms are 50% Cheaper than than global standards.

- **High Energy Costs & Lack of automation**

**Proprietary** LED technology **2x More Energy Efficient than global standards.**  
**Built Full automation** across seeding, growing and packaging

- **Lack of technology to grow beyond leafy**

Built Extensive library of 200+ **standard operating procedures** to grow more than **68+ Varieties.**

# We've Built a Full-Stack Hardware, Software & Plant Science to solve it.



Successfully developed crop recipes for 68+ varieties.

Our farms are **fully automated** integrated to **IoT** and remotely controlled.



We **build farms at 1/10<sup>th</sup> of cost** when compared to **Global Standards**

Our **Patented** grow towers grow **100x more per sq. FT**



We **save up to 50% on energy costs.**

Optimized **plant selected & bred for the future of farming**





# Key Components of our Technology Platform



Our advanced grow towers technology allows to grow **Up to 100x production per sq. FT**

Expertise in **HVAC and building design** enabling **365 days of production**

**Proprietary** LED technology **90% cheaper than global standards.**

Extensive library of **200+ standard operating procedures**

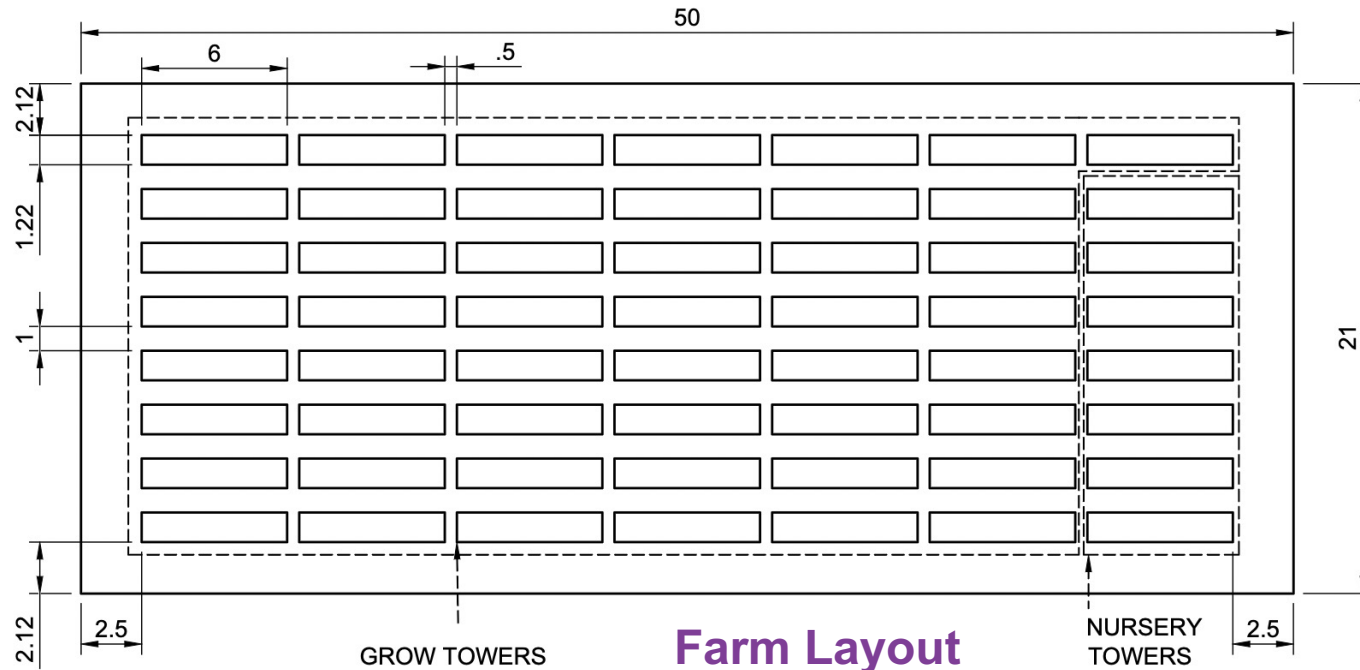
Automated **nutrient delivery system with 18 unique nutrient formulations** developed

**Integrated algorithm** for every stage of grow cycle (including custom lighting)

**Plants** optimized to grow **45% faster than traditional farms**

**Full automation** across seeding, growing and packaging

# For a 1,050 Sq. Mt. of production of Leafy



## General Growing Assumptions

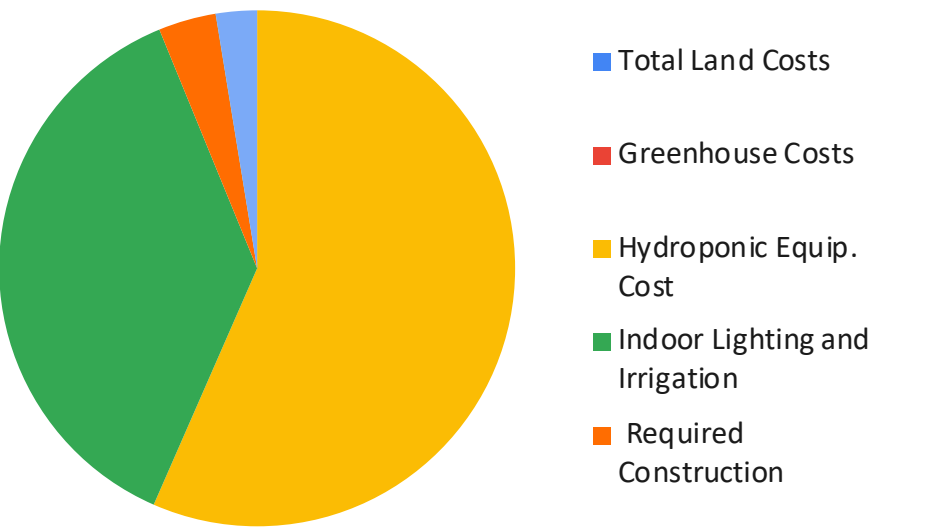
Grow Towers	49
Number of plants per grow tower	4032
Total Number of plants	197,568
% of sellable crop	98%
Crop cycles per year	12
Crops grown per year	2,370,816
Average weight per plant	100 grams
Total production Lettuce per annum	240 Tons
Assumed Blended Sale Price*	\$9/Kilo
Assumed total revenue	\$2,160,000

*Sale price assumptions taken for calculations based on market			
Carrefour Pricing	Per Kilo B2C Sale price QAR/KSA	Per Kilo B2C Sale price \$	Link for reference
Arugula	78	\$ 21.06	<a href="https://bit.ly/3Oi2sjg">https://bit.ly/3Oi2sjg</a>
Lettuce	83	\$ 22.50	<a href="https://bit.ly/3EixeE5">https://bit.ly/3EixeE5</a>
Baby Spinach	159	\$ 42.65	<a href="https://bit.ly/3EKnROG">https://bit.ly/3EKnROG</a>
Kale	89	\$ 23.38	<a href="https://bit.ly/3Vc1NSw">https://bit.ly/3Vc1NSw</a>
Blended B2B Sale Price taken for calculations		\$ 9.00/kilo	

## Return/Feasibility Metrics

Breakeven Year	13 months
5yr NPV	\$2,754,437
5yr IRR	<b>87%</b>
10yr NPV	\$7,322,689
10yr IRR	<b>91%</b>

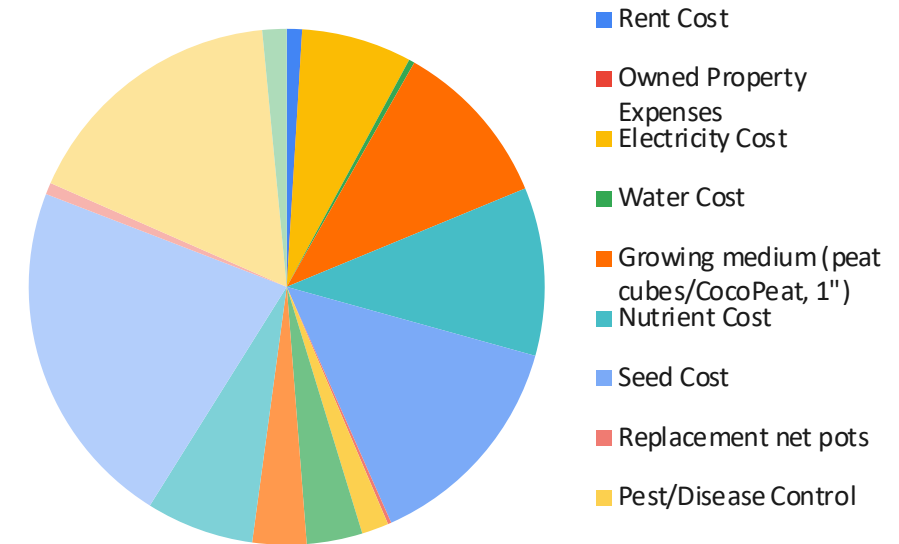
# High-level Capex and Opex Breakdown summary



## Cap-Ex Overview

(10yr, inc. replacements)

Hydroponic Equip. Cost	\$ 759,821
Indoor Lighting and Irrigation	\$ 777,505
Required Site Assembly Costs	\$ 36,000
Required Transport Costs	\$ 25,644
Local Taxes	\$ 287,814
<b>Total Cap-Ex (Excl. Local Taxes)</b>	<b>\$ 996,395</b>



Est. 1st Annual Opex Overview	
Rent Cost	\$ 3,402
Owned Property Expenses	\$ -
Electricity Cost	\$ 45,405
Water Cost	\$ 2,545
Growing medium (peat cubes/CocoPeat, 1")	\$ 74,868
Nutrient Cost	\$ 74,868
Seed Cost	\$ 99,824
Replacement net pots	\$ 2,412
Pest/Disease Control	\$ 6,000
Produce Packaging	\$ 17,843
Maintenance Cost	\$ 12,000
Logistics Costs	\$ 24,000
Labour Costs	\$ 105,000
Growing Maintenance Overhead	\$ 2,600
Urbankisaan AMC	\$ 90,000
Sales/Marketing Expenses	\$ 5,400
<b>Total OpEx</b>	<b>\$ 566,167</b>

# Roles and Responsibilities

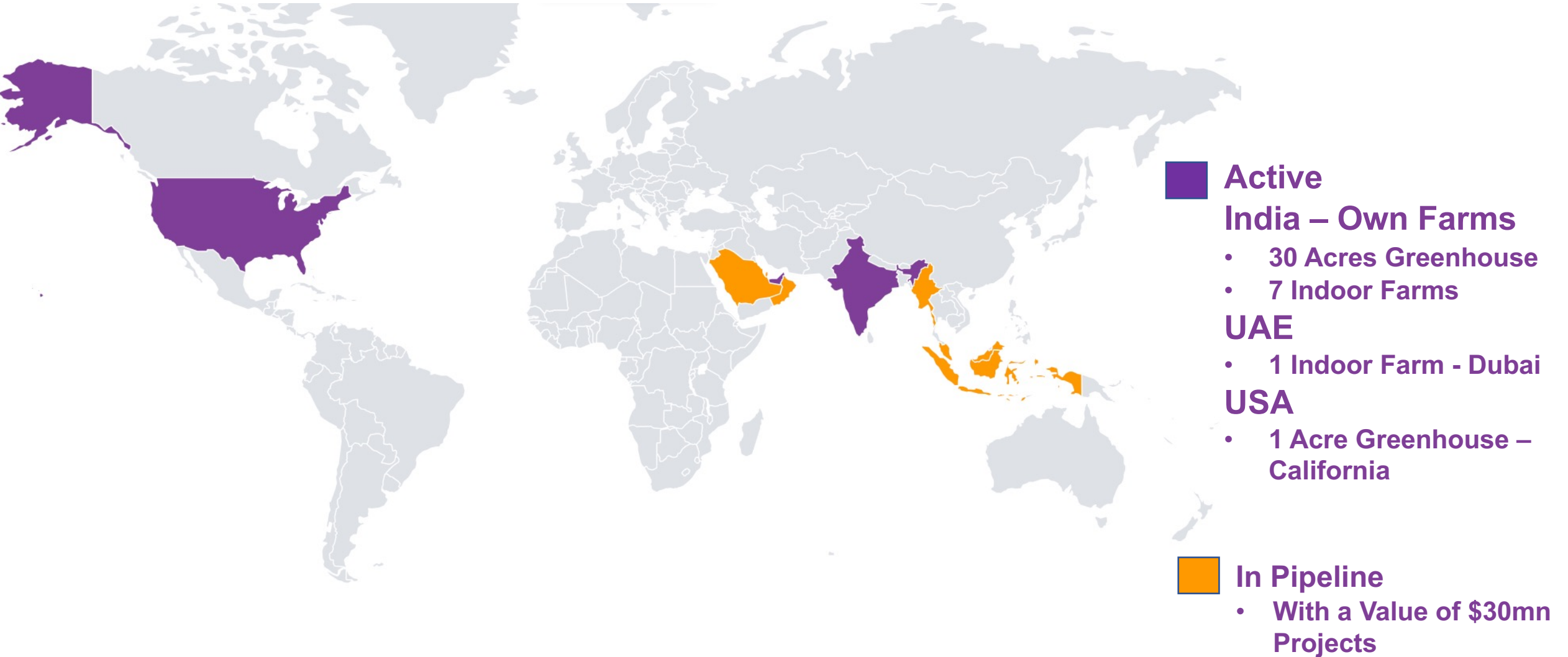
Roles and Responsibilities		
Planning and Design Phase	UrbanKisaan	Partner
Project Planning, Feasibility Analysis and Layout design	Yes	
Crop Planning and Production Planning	Yes	
Set-up of the infrastructure on site for commercial use	Yes	
Pre-Launch Phase	UrbanKisaan	Partner
How to cards & General SOPs	Yes	
Training & Trials (train the trainer)	Yes	
Crop Selection and Scheduling	Yes	Yes
Local Compliances for running and operating a farm		Yes
Post-Launch Phase	UrbanKisaan	Partner
Day to day Farm operations as per SOP's		Yes
Local Supply chain and Fullfilment of orders		Yes
Inventory - stock keeping and books		Yes
Input Growing supplies (Seeds/ Nutrients and others applicable)	Yes	
Recurring Training - quarterly	Yes	
Activities covered under AMC (Optional)*	UrbanKisaan	Partner
Maintanance of equiptments	Yes	
Daily Remote monitoring of the farm through automation devices and AI	Yes	
Weekly Farming Review Meet	Yes	
Monthly Operational reviews & QA remote audits	Yes	Yes

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## **\*On-going support as a part of AMC.**

- **Knowledge Base:** Our knowledge base has articles about the best practices for farming, food safety, operations, business development, and more! Our regularly-updated content is available 24/7 on the mobile app.
- **Troubleshooting:** Our team is available to help understand any issues you may be experiencing. We can our automation to analyse the data of the conditions inside your farm and work together to solve the problem.
- **Email & Phone Support:** When something comes up and you need help, the team is here for you. You can reach out to us via email at any time, or call us.
- **Maintenance Visit:** We do a maintenance visit at any time and a technician will visit your farm to conduct routine maintenance and perform a tune up.

# Our Farms





# The right mix of passion and experience



**Vihari  
Kanukollu**

**Co-Founder & CEO**

Featured in Forbes 30 under 30, Cost accountant and entrepreneur with a startup experience.



**Dr. Sairam**

**Co-Founder & Chief-Scientist**

ex-Head of Biotechnology in JK Agri genetics and 20+ years of experience

Ph.D. from IISc Bangalore and Post doctoral research in University Delaware

Featured in

**Forbes**

**TC TechCrunch**

  
**TIMES OF INDIA**

 **Discovery**  
CHANNEL

Featured in Discovery in "Planet healers" ( <https://bit.ly/2Eo0Sd1> )

Our Investors

 **Combinator**



**Raised  
\$1.5mn**

 **BASF**

We create chemistry

**Raised  
\$5.5mn**