



# KANTIKESHT

Our team of four in **Kantikesht** started designing and developing the first **Vertical Farming** (VF) Machine inside a shipping container, which was inspired by the American company “Freight Farm”.

We designed and manufactured every single VF machine equipment by the team because we had no access to buy standard equipment due to the sanctions.

We planted the corps (here lettuce) 3 times and each time we tried to improve the product and process.

After 3<sup>rd</sup> round of planting when the Corona slowed us and we were not totally satisfied about lettuce weight and color, we started to re-study and re-design the machine.

In the following slides you can find our activities within previous two and half years ago.





# KANTIKESHT STARTED

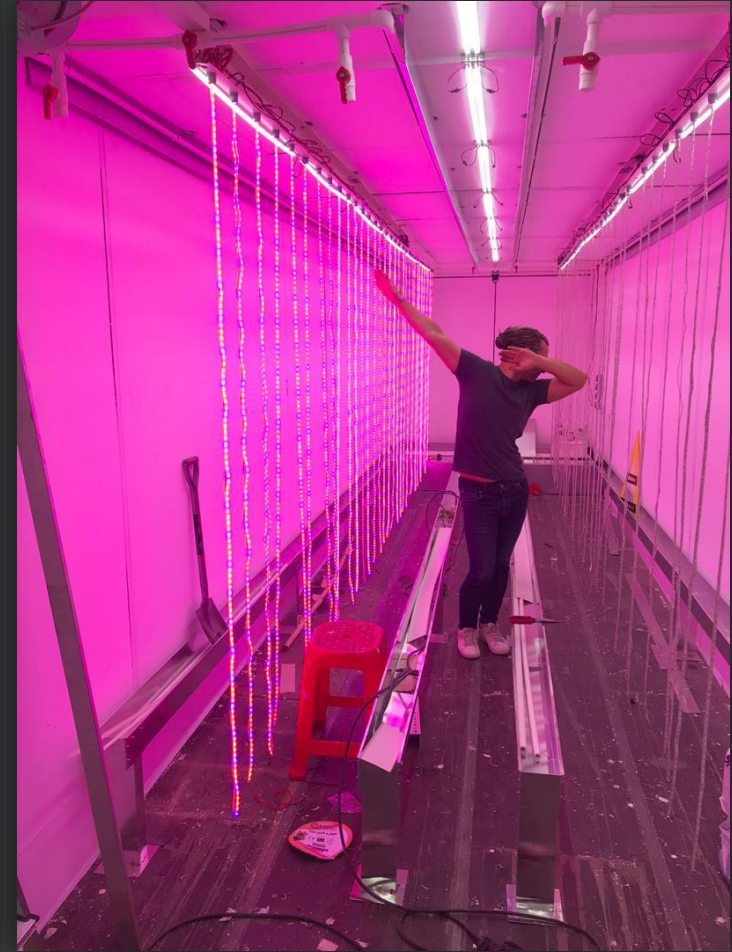


# KANTIKESHT IN PROGRESS





# KANTIKESHT IN PROGRESS





# THE 1<sup>st</sup> ROUND OF PLANTING

We constructed the VF machine and then started the first round of planting of the crops. Unfortunately, the lettuce did not reach the proper weight and color. Then we tried to figure out where the problem was laid out and recognized not providing that a sufficient amount of light was the main issue.





# THE 2<sup>nd</sup> ROUND OF PLANTING





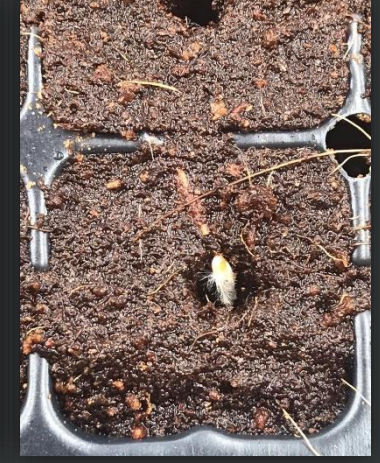
# THE 2<sup>nd</sup> ROUND OF PLANTING

At the end of the second round of planting, we realized that the changes could not get us to the point. As we have no access to the standard lighting equipment with sufficient data sheets, our estimation of the amount of light the plant needs was not correct. So, changes sound inescapable. We also improved the air circulation system of the container and we got ready for the 3rd round.





# THE 3<sup>rd</sup> ROUND OF PLANTING





# THE 3<sup>rd</sup> ROUND OF PLANTING

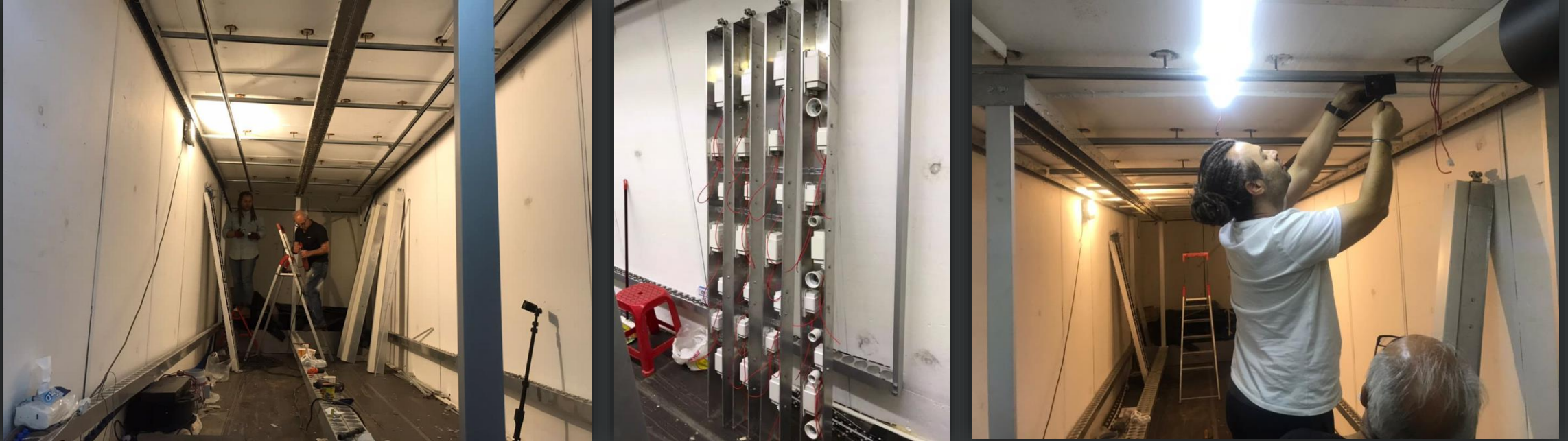
Fortunately, in this round, lettuces got the proper weight, but we believed they had room for improvements. So, we came back to the designation table and made major changes to optimize every aspect of product and machine layout. At this stage of the project, re-financing was our serious issue, so we had to slow down the process.





# RE-DESIGNING AND RE-MANUFACTURING PHASE

Implementing new designs and supplied equipment





# Thank You

Mehdi S. Aghdam, Mohsen S. Aghdam  
Somayeh Sadeghpour, Marjan Daliri

09122118171/09124382217  
[Instagram.com/kantikesht](https://www.instagram.com/kantikesht)

