

There's a situation that I would like to solve, this country is more and more becoming industrial, even though it is more known as an agrarian nation, land availability is also a problem because there is only limited land in this country more so the one that is sufficient for farming. In a way, this situation is concerning because there is a possibility that food supply can be a problem, the solution I want to make is a place where we can farm efficiently, and in an also smart way.

Vertical farming is a thing in other countries, it saves the land by exploiting vertical space and it also uses hydroponic which is a soil-less method of farming, this method also saves water because the water is recirculated instead of evaporating, adding IoT in this type of farming makes maintenance and treating farm plant easier and predictable. Also, online delivery service like Gojek and Uber has been a big thing right now because of the convenience. Having the same thing for fresh produce is also a potential solution not only ensuring the produce customer get is the freshest they'll get but also the convenience.

The target market that the most make sense is average people, especially the one who bought produce in supermarkets, the target can buy it directly from us because we're able to farm the produce in the city without a distributor and other things, possibly reducing the cost. The other possible market is people who like gardening, it is possible to sell a kit that we use to farm.

New technology is very important for this idea because, in conventional farming, we rely on weather and soil conditions to make sure the farm is in optimal conditions, with hydroponics and IoT is possible to scale vertical farming where is possible for one person to manage the farm, Sophisticated technology like machine learning can be a potential tool in this idea, automatic scheduling for things like nutrient adjusting or conditioning is possible thanks to this technology.