



## Vegetable Stand Project

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UCT KNOWLEDGE CO-OP

**The UCT Knowledge Co-op facilitated this collaborative project  
Between Abalimi / Harvest of Hope and UCT.**

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“Harvest of Hope provides freshly packed, organically grown vegetables, produced to the highest standards, with love and care. All vegetables are grown in gardens of Cape Town’s townships.”

# Visit to Harvest of Hope Pack House



- Abalimi Bezekhaya: non-profit development organization
- Farms produce 420 boxes a week- quick turnover
- No soft fruit- short shelf life
- Completely community-supported system

# Pack House existing infrastructure



Packing stands currently being used in the pack house.

Problems:

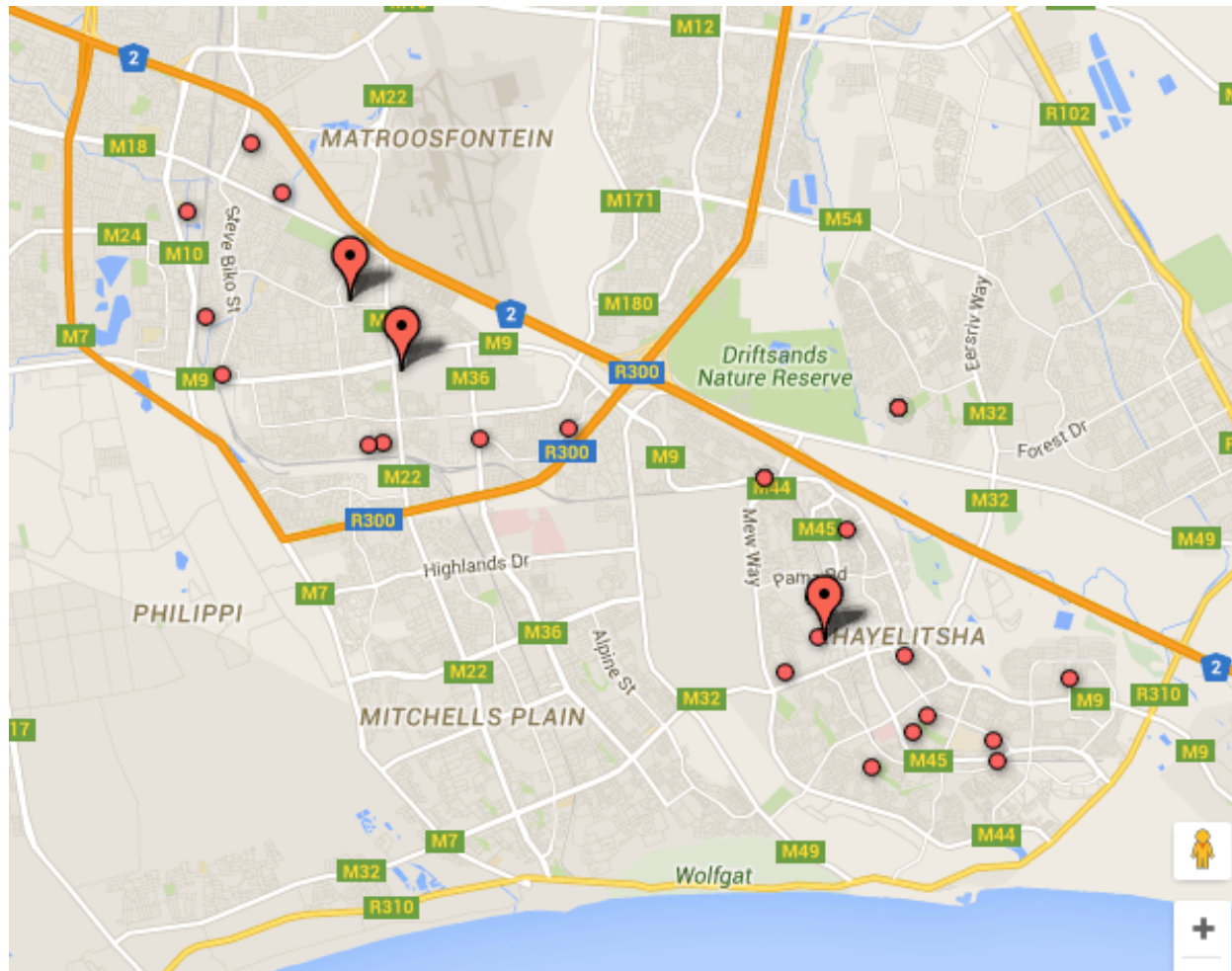
- Timber stands are hazardous i.e. splinters
- Stands are unstable
- Unsanitary

# Harvest of Hope Facts

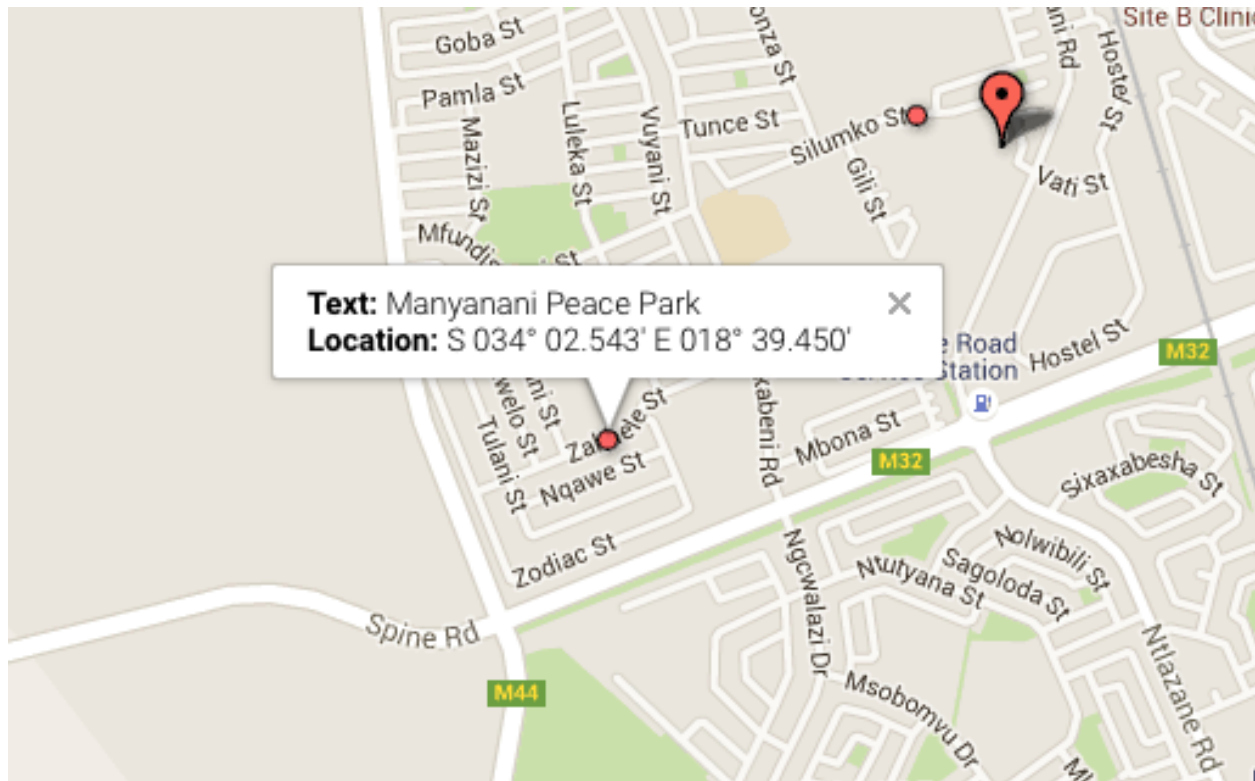
- Survival, subsistence, semi-commercial
- Under semi-commercial falls the box scheme, which is where vegetables are packed into boxes and distributed to restaurants and people living in Cape Town. This is done on a weekly order basis at 37 different drop-off points around town.
- Goal: target of 1500 drop-offs at the end of the year
- There are 150 semi-commercial farms within the townships that supply vegetables for these boxes.
- Monday: vegetables arrive. Perishables and herbs immediately put in cold store.
- Sizes of boxes: small, medium, wholesale.
- Boxes/ crates= returnable.
- Quality control assessment is done on a Monday as well.
- Packets for herbs such as rocket are made from biodegradable starch.



# Map of Community Gardens



# Manyanani Peace Park Farm



# Site Visit







## AIM:

To design a vegetable stand that will enable the community farmers to display and sell their produce directly from their farms.

# Indicators for design: Material-based

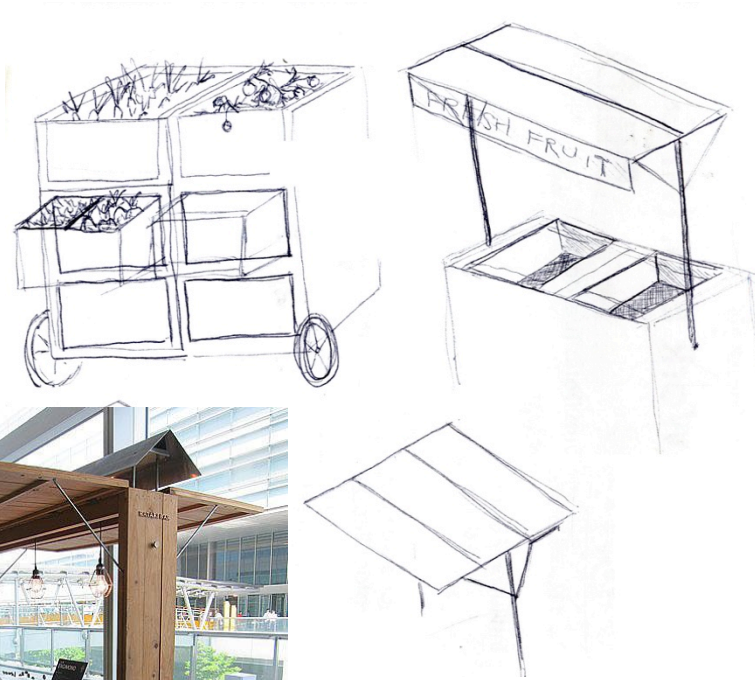
- Food safety
- Nails
- Splinters
- Glass- can break- doesn't fit in the material requirements for good manufacturing
- Costing and budget= important

# Indicators for design: Function-based

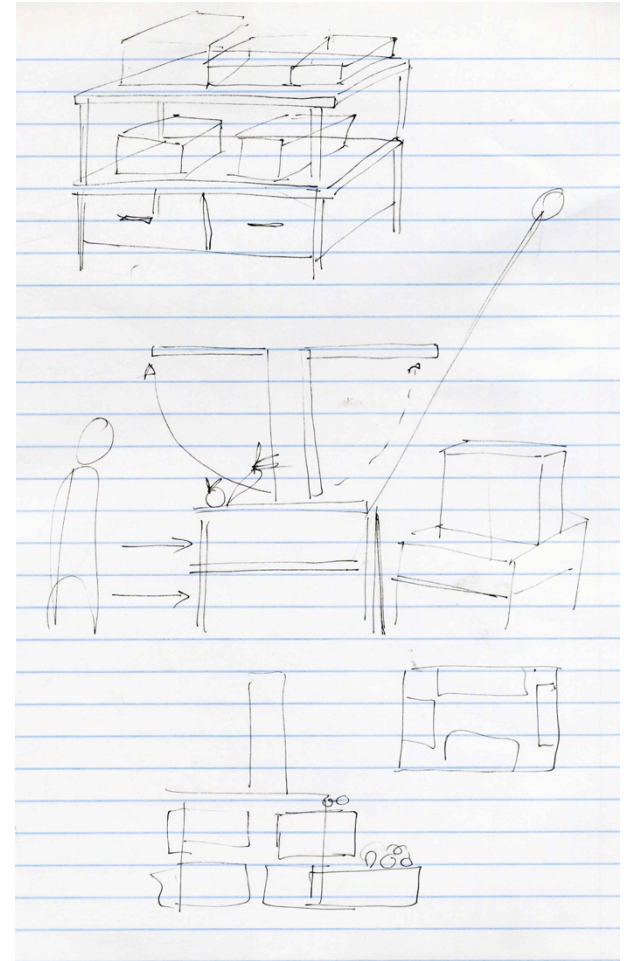
- Sale of fresh produce
- Shading
- Priority on coolers: maintaining shelf life
- Segments within stands for different vegetables
- Theft
- Multi-functional i.e. cleaning onions like in pack house
- Less processing in pack house- grading vegetables in the garden
- No direct sunlight
- Mobility



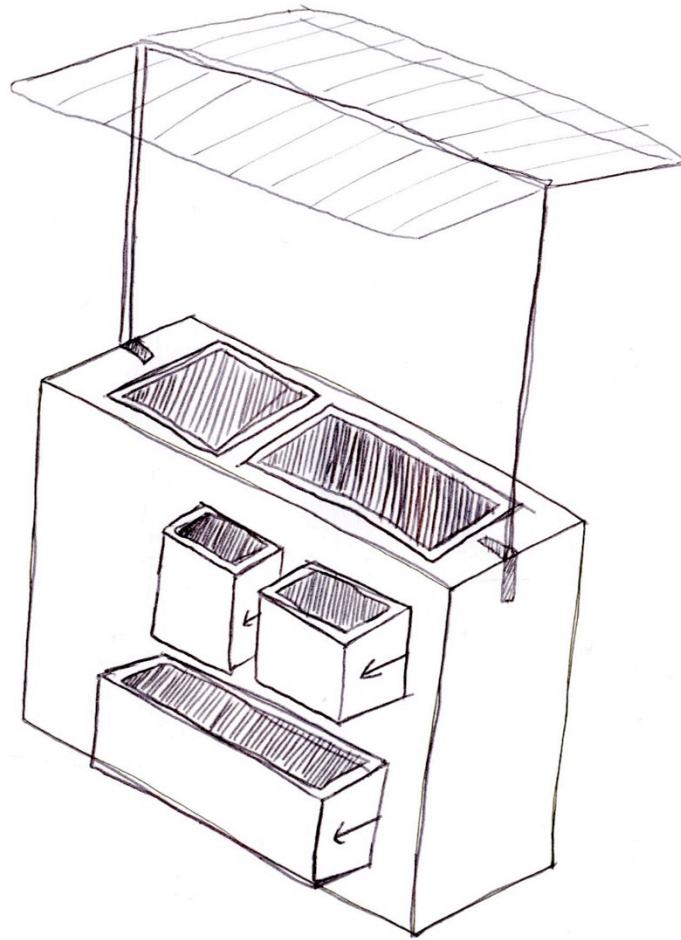
# Initial design sketches



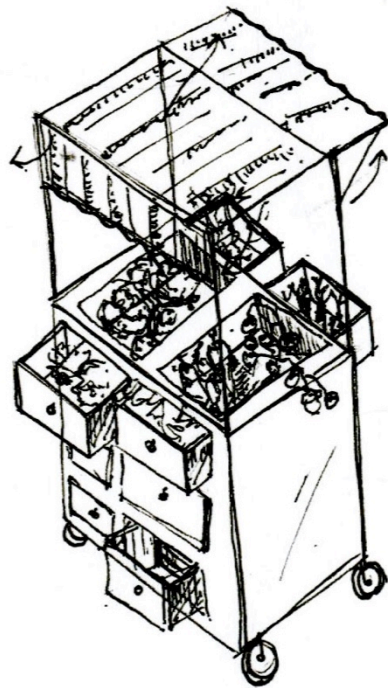
Precedent



# Process work



# Process work



— corrugated iron  
roofing (allows  
for water run-off).

— steel structure  
(could be painted).

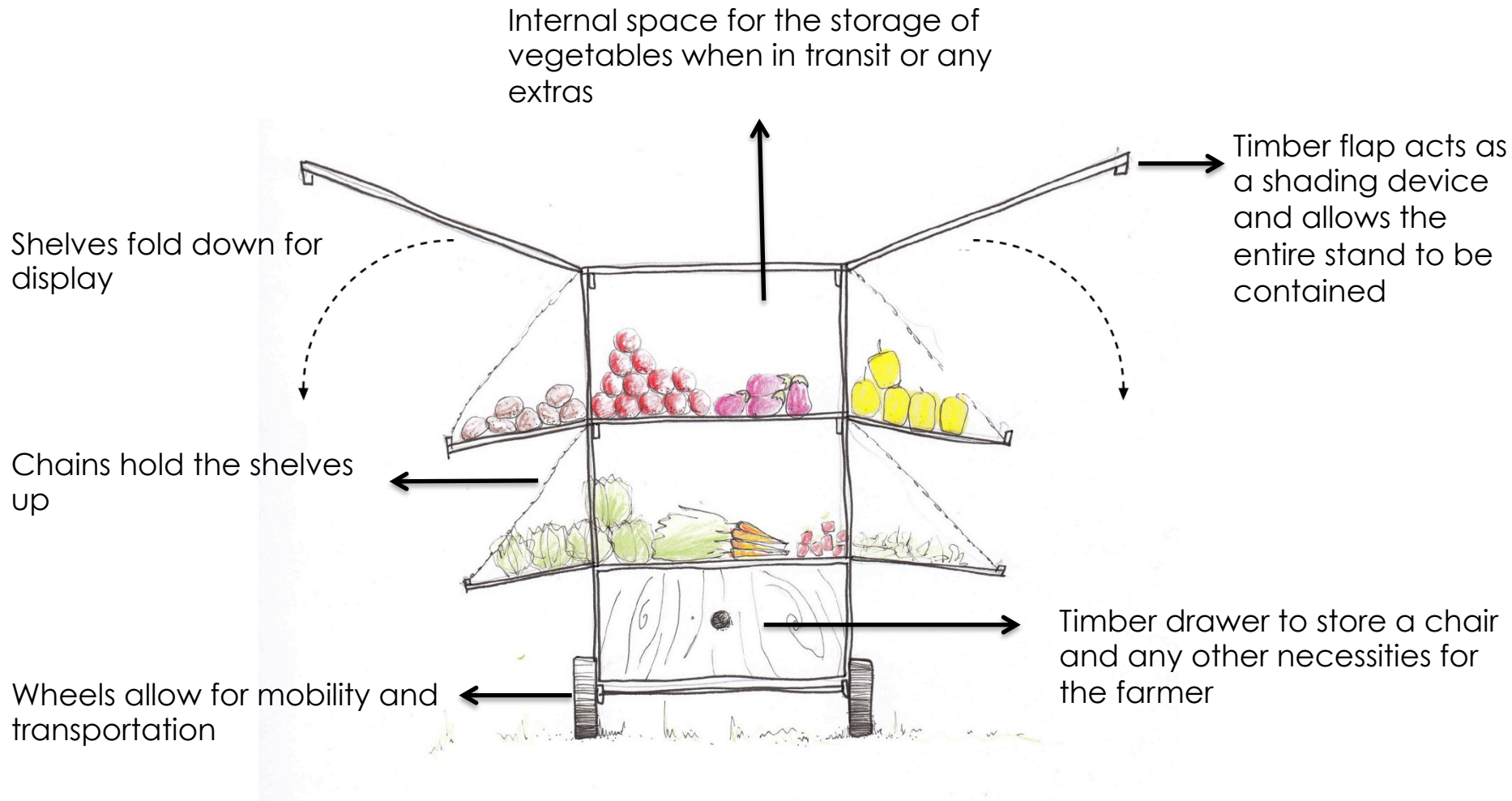
— wheels allow for easy  
transportation.

# Feedback from interim meeting with Rachel McKinney from Harvest of Hope

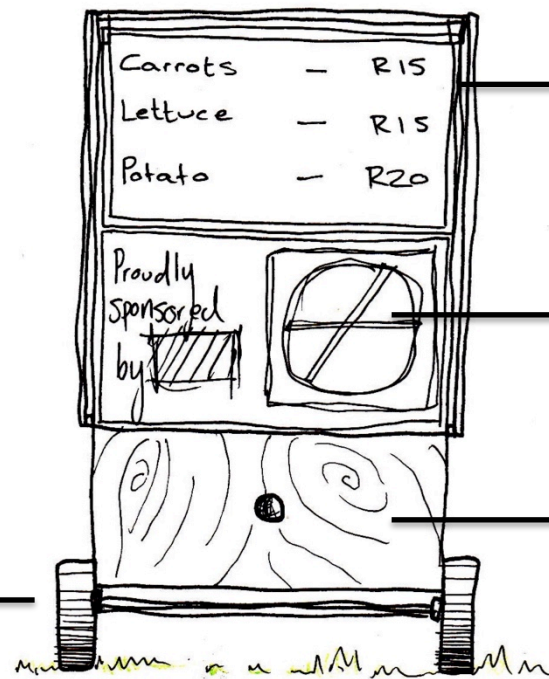
- Liked the idea of using wheels, having a movable store
- Show two drawings of vegetable stand, both open (in use) and closed (in transit)
- Extend the shading device
- The vegetable stand should fold away and lock up like a kiosk
- Refrigeration would be an added bonus but not necessary for the purpose of this project
- The design is something that is easy to replicate, thus can be made to use on all their farms
- Can be made using timber as food safety is not a priority for this project. The main objective is to provide the farmers with a means of generating extra cash
- Signage is very important as a means to promote/thank the sponsors
- Potentially make use of a chalkboard to inform pedestrians on what is being sold



# Final Design- when in use



# Final Design- when in transit



Blackboard can be used for a price list

Extra space for sponsors' logos

Timber acts as framework for stand

Wheels allow for mobility and transportation

# Estimated Costing per Stand

Item	Unit price	Quantity	Total
Timber frame 32mm x 69mm	R312.00 per 3m	6	R1872.00
Timber pallets	R30.00	10	R300.00
Wheels	R160.40	4	R641.60
Cutting Screws 7mm	R29.00 per pack of 10	15	R435.00
Chain	R39.00 pm	3m	R117.00
Hinges 36x34	R64.00 Per pack of 2	6	R384.00
Bolt pad lock	R29.00	2	R58.00
Lock & key	R147.00	2	R294.00
Timber Dowel	R19.00	2	R38.00
Unforeseen Costs			TBC
<b>TOTAL</b>			<b>R4 139,60</b>

\*prices subject to change