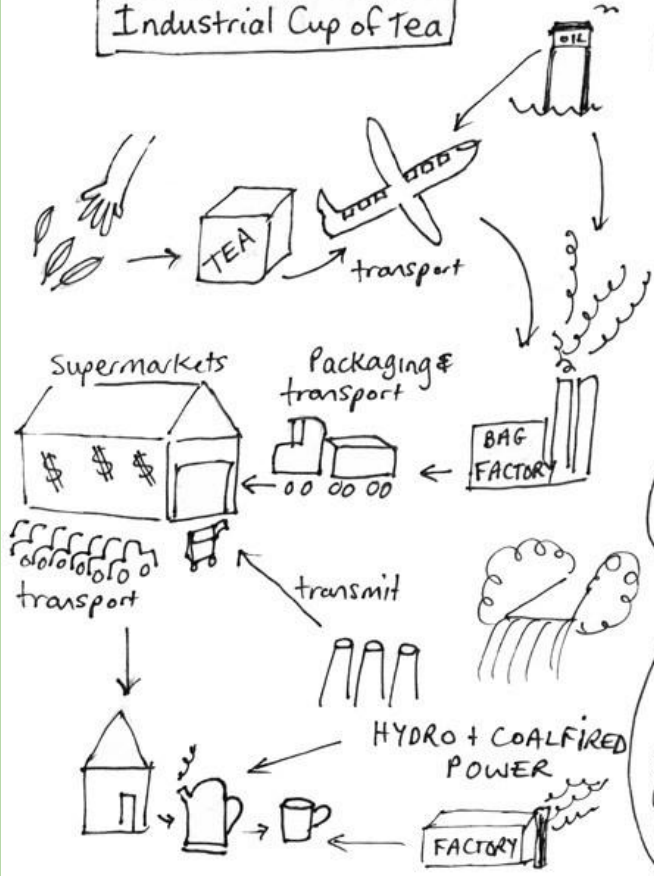


PERMACULTURE

# PERMACULTURE

- Permanent - Agriculture
- is a sustainable food production system
- Sustainable system... “IS ANY SYSTEM THAT IN ITS LIFETIME CAN PRODUCE MORE ENERGY THAN IT TAKES TO ESTABLISH AND MAINTAIN IT.” -BILL MOLLISON CO-CREATOR OF PERMACULTURE

# Industrial Cup of Tea



# Permaculture Cup of Tea



# HISTORY

- Started in the mid 70's
- Created by Bill Mollison and David Holmgren
- Began as an “interdisciplinary earth science”
  - ecology
  - biology
  - pedology (soil science)
  - organic/regenerative farming
- Focused into sustainable food production

# MODERN AGRICULTURE

- We are a monoculture society
  - threatens biodiversity
  - depletes soil
  - wastes water
- Food waste is very high – while food insecurity is high



# DESIGN & COMMUNITY





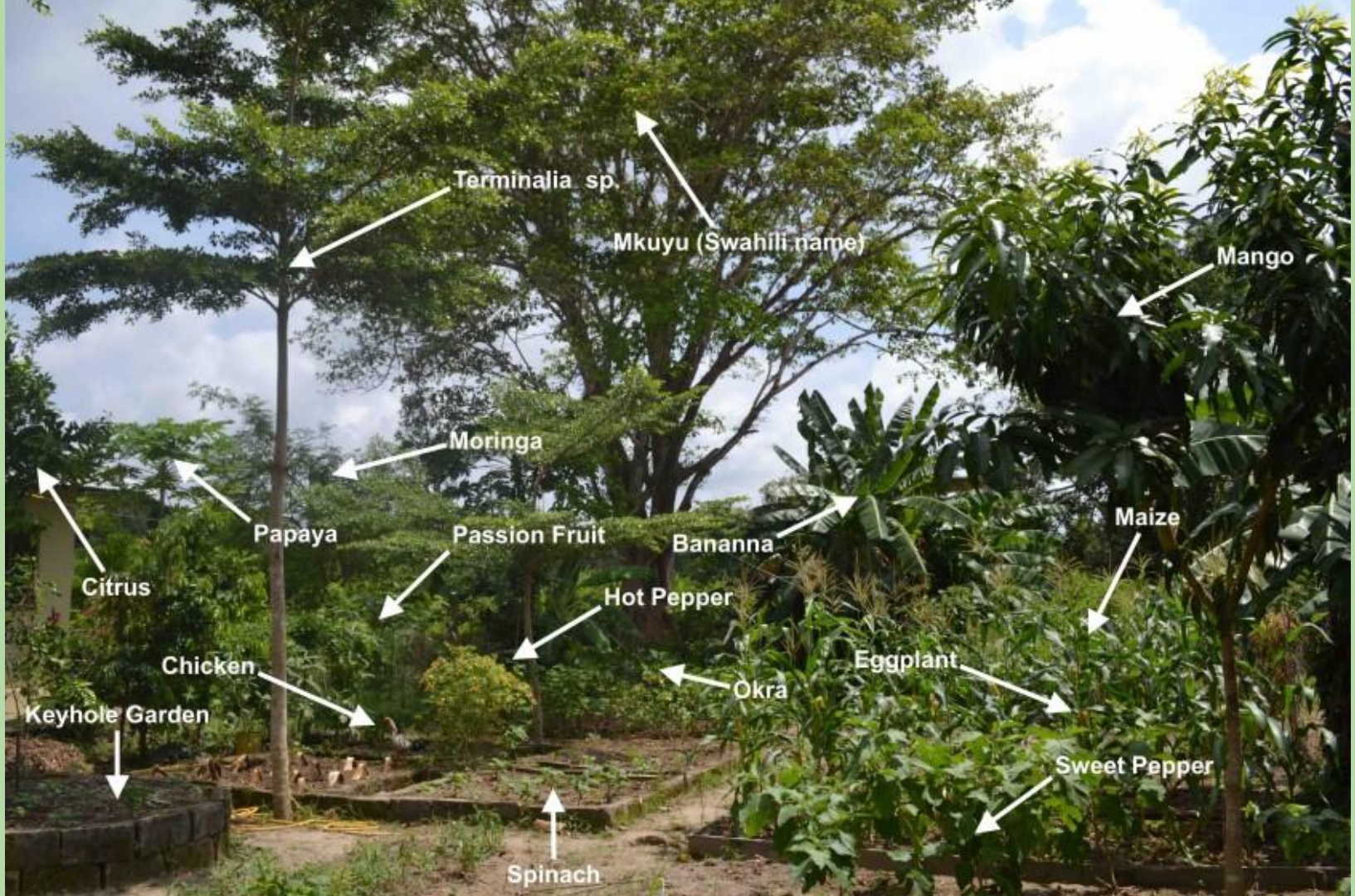
# EXAMPLE

Planting a shade tree

1. near shade loving plants
2. select a tree that bears fruit for your consumption
3. select a tree that will attract insectivorous birds that will control insect pests







Terminalia sp.

Mkuyu (Swahili name)

Mango

Moringa

Papaya

Citrus

Passion Fruit

Bananna

Maize

Hot Pepper

Chicken

Okra

Eggplant

Sweet Pepper

Keyhole Garden

Spinach




# COMMUNITY



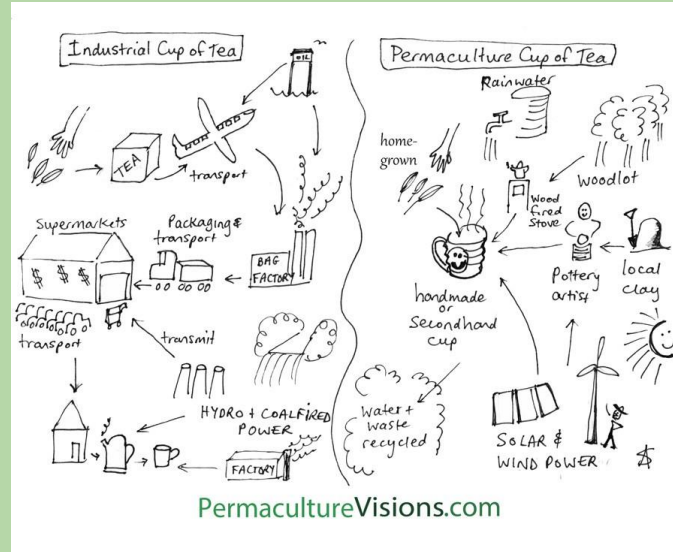
PERMACULTURE IS MOST EFFECTIVE WHEN MULTIPLE PEOPLE WORK TOGETHER

# PROBLEMS WITH PERMACULTURE

1. Requires a shift in food culture to be successfully implemented large scale
  - a. Few farmers + many consumers  Farmers/Consumers
2. Not necessarily profitable if focussed on strictly growing
3. Requires a lot of knowledge from multiple focuses

# PROGRAM IDEAS

- Matching game with companion plants etc
- Design your own backyard permaculture garden
- draw a food product map



# RESOURCES

- History
  - <http://pacific-edge.info/2007/07/a-short-and-incomplete-history-of-permaculture/>
- Differences organic & Permaculture
  - <http://www.permaculturevisions.com/difference-between-organic-gardening-and-permaculture/>
- profitable farms at different scales
  - <https://permacultureapprentice.com/successful-permaculture-farms/>
- Very good explanation of Permaculture (starts at 0:37)
  - <https://www.youtube.com/watch?v=0mwRAf3z9ag>