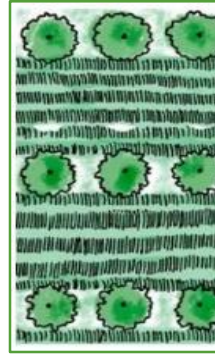


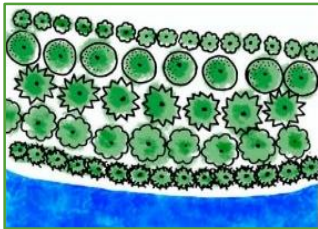
Agroforestry in Hawaii

Alley Cropping

- Rows of trees with short-term crops in between
- Combining trees w/ short-term crops spreads out production and risk
- Prevents damage from winds, increases diversity for wildlife, provides short & long-term production, improves soil microbial activity, etc.
- Examples: planting pineapple rows in between rows of mango; breadfruit rows w/soybean, moringa trees w/squash, etc.



Riparian Forest Buffer

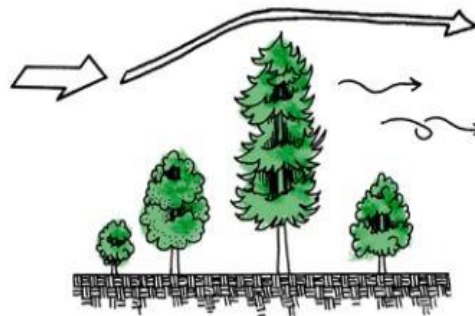


- Trees, shrubs, & herbaceous plants along waterways
- Prevents flood damage, stabilizes stream banks & improves wildlife habitat

Great environments for cultivation of fruits and/or nuts, aromatic herbs, fuelwood, decorative plants & mushrooms.

Windbreak

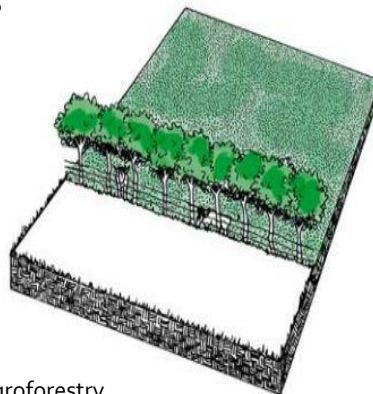
- Redirects, filters & slows winds
- Reduces soil erosion, increases water use efficiency, raises property values, creates visual screens while offering fruit & timber production



Species include noni, soursop, avocado, ulu, neem, ironwood, tamarind, clove, coconut, etc.

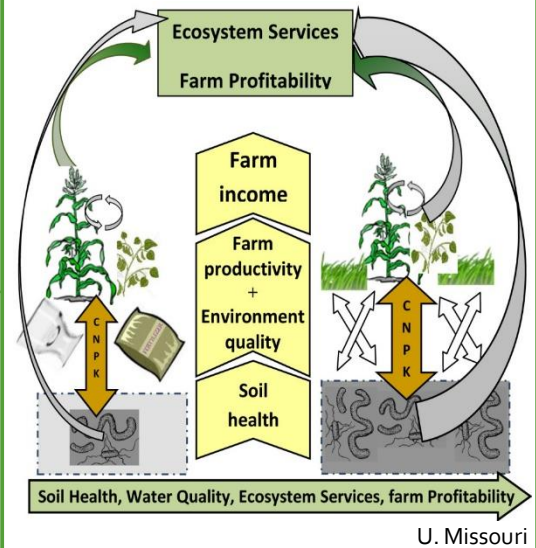
Hedgerow Planting AKA 'Living Fence'

- Living fences can also act as windbreaks and riparian buffers
- Cheaper to install and requires less maintenance than traditional fences
- Supplemental income can be acquired from living fences by planting fruit/nut trees or using as mulch & fuelwood
- Examples: moringa, hau, salak palm, pandanus, etc.



References: Elevitch, "Grower's Guide to Pacific Island Agroforestry Systems, Information Resources, and Public Assistance Programs".

Soil Health & Agroforestry



Why should trees be included in your farm?

- Improves soil health
 - Bio activity in soil can be up to 3 times higher under trees than in open fields
- Nitrogen fixation
 - Provides more available nitrogen for crops
- Lessens wind speeds
 - Prevents soil erosion
- Lessens runoff & sediment
 - Infiltration & water uptake by trees' roots & keeps nutrients on land for production
- Cooler temps & shade
 - Allows for more microbial activity in soil creating healthier soil
- Can be a viable crop
 - Timber, fruit, nuts, etc. can act as a conservation function and crop alternative increasing crop diversity and production