



Improving Food Security in Tuvalu through Sustainable Agroforestry Systems



Global Climate Change Alliance: Pacific Small Island States project



- 2) Mix well all the above materials.
 - Turn every week
 - Let the compost decompose for 2 months
 - Then plant seedlings or seeds in the compost and let them grow

Method 2 Composting below ground:



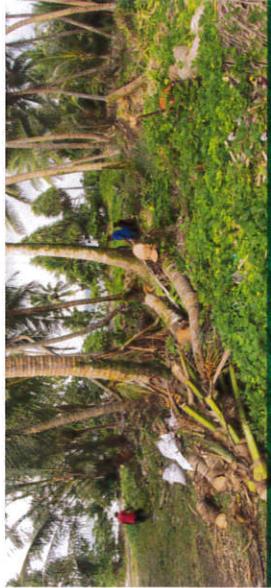
1. Collect one equal unit of each of the following materials:
 - Top soil/black soil
 - Dry/rotten plant leaves
 - Rotten coconut logs/coconut husks
 - Pig/chicken manure
2. Mix these four components together
3. Fill planting holes/trenches/beds
4. Plant tree crops

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Coconut trees that have been thinned out in order to maximize productivity

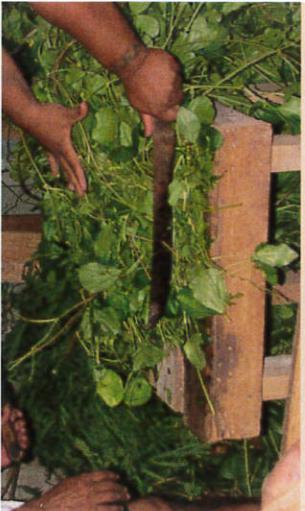
8. What is composting?

- Composting is a technique used to accelerate the natural decay process. The technique converts organic waste to mulch which is used to fertilize and condition the soil.



9. How do I make compost?

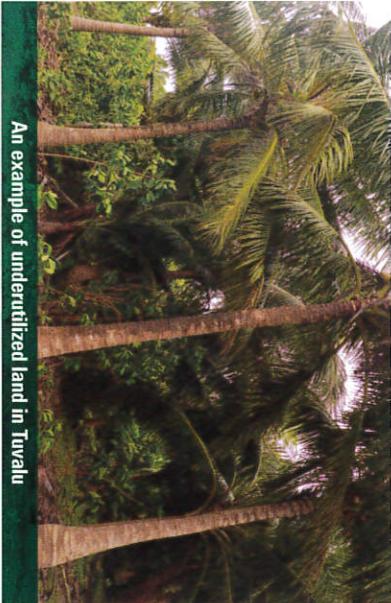
Method 1 Composting above ground:



- 1) Collect one unit of each of the following materials:
 - Black soil/top soil
 - Green and dried leaves (cut into small pieces using bush knives)
 - Rotten logs, coconut husks and other woody material (cut into smaller pieces)
 - Pig/chicken manure; dried and broken into finer pieces is preferred

4. What is Agroforestry?

- It combines agricultural and forestry techniques to create more productive, profitable and sustainable land-use systems, or simply 'trees and crops planted together'



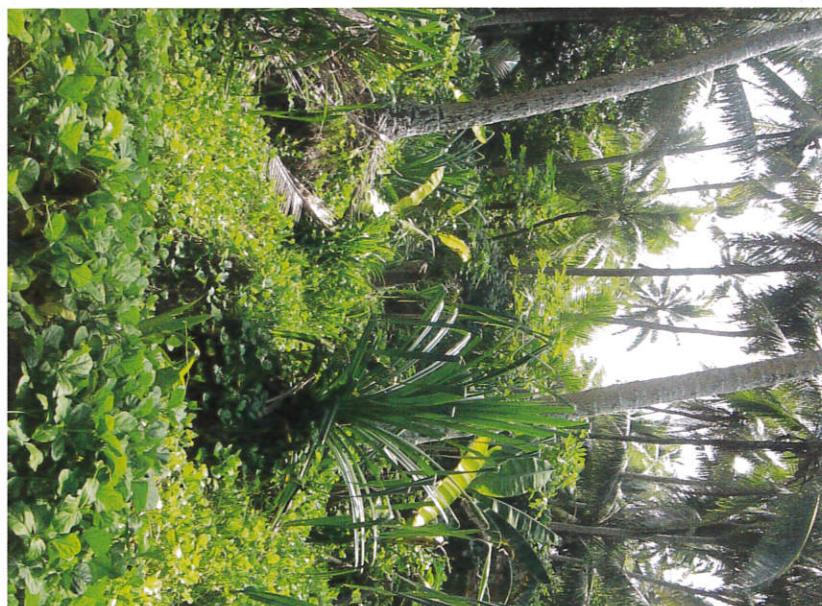
An example of underutilized land in Tuvalu

1. What is "underutilized land"?

- Land that is left idle and not being used for any productive purposes
 - Such as: unused pulaka or taro pits, bush,

2. Why make use of your underutilized land?

- To grow your own food
 - To earn money from selling produce
 - To improve Tuvalu's food security for times of disasters
 - To feed your family
 - To decrease the amount of greenhouse gases, i.e. CO₂, in the atmosphere
- Plant trees and crops together through AGROFORESTRY
 - Improve the soil through COMPOSTING



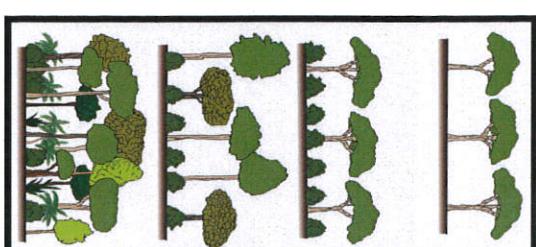
6. Key crops for Agroforestry:

Tall trees	Low trees/bushes	Crops
Coconuts	Banana	Cassava
Breadfruit	Pandanus	Sweet potatoes
Wild figs	Papaya	Taro

7. How can I make an Agroforestry System on my land?



- Clear the land and cut down senile or closely packed coconut trees.
- Prepare the underlying land for planting by digging 1-2 feet deep trenches and filling them with compost (see instructions in No. 9) to enrich the soil.
- Plant low lying crops, smaller trees, and taller trees together using a three-tiered approach in order to maximize the productivity of the land.
- Monitor and evaluate the success of the crop and tree seedlings in terms of growth, productivity, and adaptation to climate stresses for future planning.



Healthy agro-forestry site with multiple crops and trees



An agroforestry site with coconut trees and cassava