

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



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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Improving Food Security in Tuvalu through Sustainable Agroforestry Systems





An example of underutilized land in Tuvalu

### 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.

#### 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. CO<sub>2</sub>, in the atmosphere

#### How to best use your underutilized land?

- Plant trees and crops together through AGROFORESTRY
- Improve the soil through COMPOSTING



An agroforestry site with coconut trees and cassava

### What is Agroforesty?

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



# 5. Benefits of Agroforestry:

- · Improved soil fertility: Deep rooted trees take up soil nutrients and recycle these through leaf decomposition
- Soil conservation: Reduction of surface runoff, nutrient leaching and soil erosion
- · Protect soil, animals, and crops from extreme weather conditions
- Improve water quality
- · Produce multiple products on one piece of land (i.e. food, fibre, bio-energy, wood, flowers, medicine)

### 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



agroforestrv site with multiple crops and trees

- 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.