CHALLENGES AND PROSPECTS IN CONTEXTUALIZING FMNR IN TIMOR-LESTE

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FMNR IN TIMOR LESTE

1. **WHAT** IS FMNR
2. **WHO** IS DOING FMNR
3. **WHY** COMMUNITIES DO NEED FMNR
4. **HOW** TO DO FMNR
FARMER MANAGED NATURAL REGENERATION

WHAT

TREES / PLANTS

- Trees
- Shrubs
- Herbs
- Crops
- Grasses

WHO

FARMER
WHY COMMUNITIES DO NEED FMNR

**ECONOMIC BENEFIT**
- Food
- Fuel
- Clothing
- Construction
- Medicine
- Cash

**ENVIRONMENTAL BENEFIT**
- Ecosystem services
  - Climate regulation
  - Carbon sequestration
  - Nutrient recycling
  - Clean water
- Erosion control
- Restoring ecology
- Enhance biodiversity
## HOW TO DO FMNR

### 1 – PROTECTION (from)
- Fire
- Cutting/slashing
- Livestock

### 2 – TREE MANAGEMENT
- Reducing competition
- Coppicing
- Pruning
- Lopping
- Pollarding
COPPINGING (for high biomass)

BEFORE TREE TO BE COPPICED
CUT CLOSE TO BASE IN WINTER
FOLLOWING SPRING SHOOTS RAPIDLY REGROW FROM STOOL
7-20 YRS LATER COPPICE READY FOR HARVEST
THINING & PRUNING COPPICES
(for better timber & fruit production)
COFFEE PRUNING
(for better Coffee production)
POLLARDING (for high biomass)
WHY FMNR IN TIMOR LESTE?

MAJOR CHALLENGES FMNR POTENTIALLY HAVE A POSITIVE IMPACT ON:

- High degree of deforestation (23.2% of forest cover lost between 1990-2010)
- Geo morphology of the major part of the country
- Climate risks (high moisture & high temperature)
HIGH DEGREE OF DEFORESTATION
HIGH DEGREE OF LAND DEGRADATION
HIGH DEGREE OF LAND DEGRADATION
CHALLENGES IN PROMOTING FMNR

- FMNR is relatively new in timor leste
- Many areas covered by eucalyptus trees and the relative value of eucalyptus is not attractive at this time
- Most better value timber species have long rotation period
- Knowledge on potential non timber plant species and their role in fmnr is not available
CHALLENGES IN PROMOTING FMNR

- Tropical climate with high biomass production, thus no shortage of fodder & fuel
- The acceptance of FMNR is highly dependent on the economic return of existing species
- Traditional FMNR practices are existing but not recognised
- Absence of FMNR sensitive extension methodology that help the adoption of fmnr by farmers
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1. Vegetation cover & fuel wood & construction
2. Land slide control
3. Cash crop
4. Soil improvement – food security
5. Wind break
1. VEGETATION COVER & EROSION CONTROL
(FMNR for private & community woodlot)
2. LAND SLIDE CONTROL

FMNR for SALT (Slopping Agricultural Land Technology)
2. LAND SLIDE CONTROL
BAMBOO MANAGEMENT
3. CASH CROP & VEGETATION COVER
(COFFEE BASED FMNR)
4. SOIL IMPROVEMENT - FOOD SECURITY

TITHONIA (*Tithonia diversifolia*)
IMPORTANCE OF TITHONIA

• High nitrogen content
• High potassium content
• Fast decomposing (2-4 weeks)
• Very high biomass production
• Good for green manuring
• Available almost everywhere
• Some pesticidal characteristics reported
• Fodder for ruminants
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TITHONIA IMPACT ON VEGETABLES (Baucau)
GAMAL - *Gliricidia sepium* (Bobonaro)
GAMAL - *Gliricidia sepium*  
(*Bobonaro*)
WIND BREAK

Bamboo for windbreak
BAMBOO CUTTINGS PREPARATION BOBONARO
RESEARCH AGENDAS & FUTURE ENGAGEMENTS
POTENTIAL OF PIGEON PEA AS AN FMNR CROP
POTENTIAL OF SUGARCANE AS AN FMNR CROP
POTENTIAL OF BANANA AS AN FMNR CROP
THE END

THANK YOU