

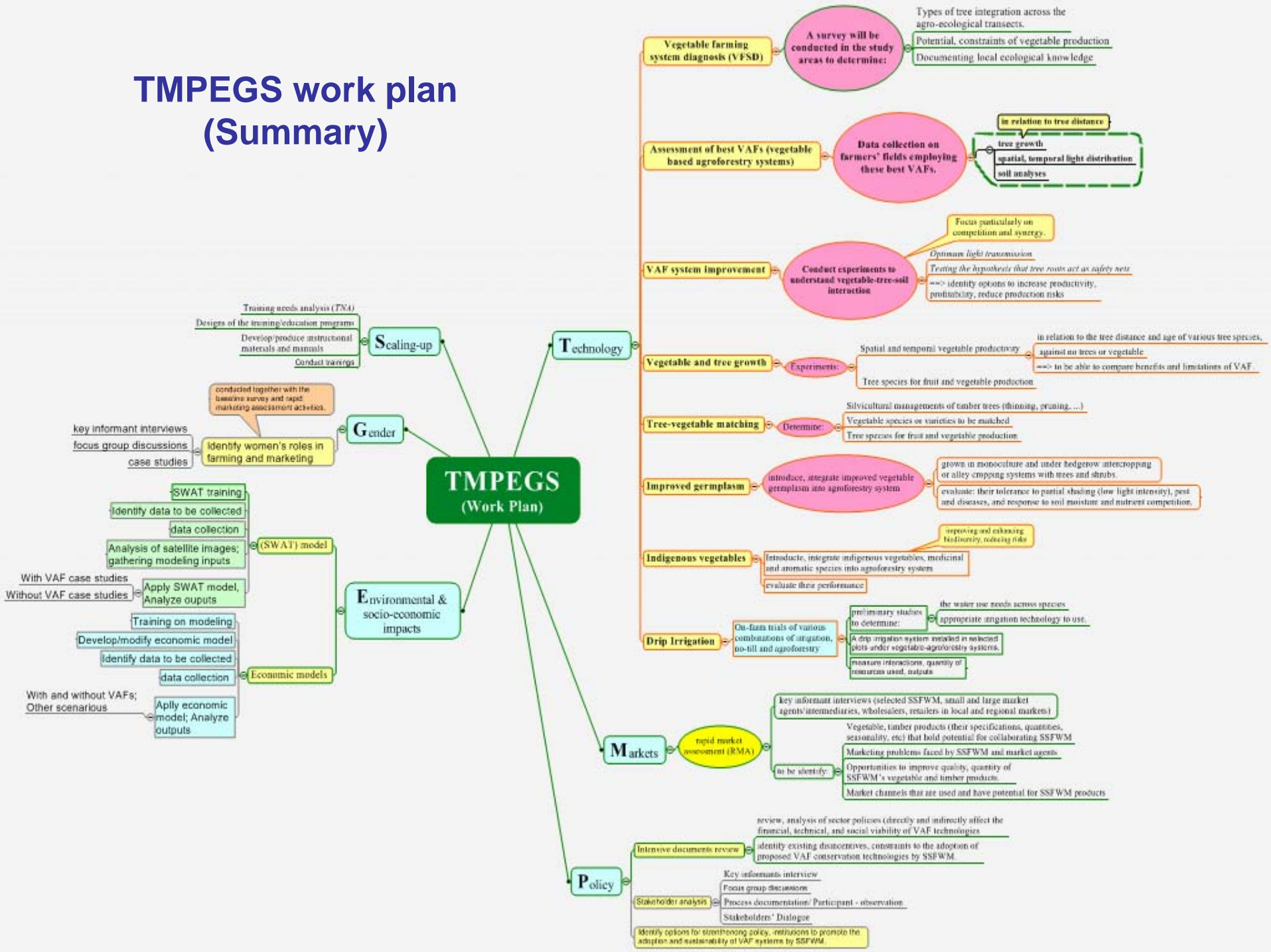
Agroforestry and Sustainable Vegetable Production in Southeast Asian Watersheds

NLU kick-off workshop (May 12, 2005)

Overview of the work plan for the Vietnam TMPEGS Team

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TMPEGS work plan (Summary)



TMPEGS (Work Plan)

Technology

- Vegetable farming system diagnosis (VAFSD)**
 - A survey will be conducted in the study areas to determine:
 - Types of tree integration across the agro-ecological transects.
 - Potential, constraints of vegetable production
 - Documenting local ecological knowledge
- Assessment of best VAFs (vegetable based agroforestry systems)**
 - Data collection on farmers' fields employing these best VAFs.
 - tree growth
 - spatial, temporal light distribution
 - soil analyses
- VAF system improvement**
 - Conduct experiments to understand vegetable-tree-soil interaction.
 - Focus particularly on competition and synergy.
 - Optimum light transmission
 - Testing the hypothesis that tree roots act as safety nets.
 - => identify options to increase productivity, profitability, reduce production risks

- Vegetable and tree growth**
 - Experiments:
 - Spatial and temporal vegetable productivity
 - in relation to the tree distance and age of various tree species.
 - against no trees or vegetable
 - => to be able to compare benefits and limitations of VAF.
 - Tree species for fruit and vegetable production

- Tree-vegetable matching**
 - Determine:
 - Silvicultural managements of timber trees (thinning, pruning, ...)
 - Vegetable species or varieties to be matched
 - Tree species for fruit and vegetable production

- Improved germplasm**
 - Introduce, integrate improved vegetable germplasm into agroforestry system.
 - grown in monoculture and under hedgerow intercropping or alley cropping systems with trees and shrubs.
 - evaluate: their tolerance to partial shading (low light intensity), pest and diseases, and response to soil moisture and nutrient competition.

- Indigenous vegetables**
 - Introduce, integrate indigenous vegetables, medicinal and aromatic species into agroforestry system.
 - evaluate their performance
 - improving and enhancing biodiversity, cooking rules

- Drip Irrigation**
 - On-farm trials of various combinations of irrigation, no-till and agroforestry.
 - preliminary studies to determine:
 - the water use needs across species.
 - appropriate irrigation technology to use.
 - A drip irrigation system installed in selected plots under vegetable-agroforestry systems.
 - measure interactions, quantity of resources used, outputs

Markets

- rapid market assessment (RMA)
 - key informant interviews (selected SSFWM, small and large market agents/intermediaries, wholesalers, retailers in local and regional markets)
 - Vegetable, timber products (their specifications, quantities, seasonality, etc) that hold potential for collaborating SSFWM
 - Marketing problems faced by SSFWM and market agents
 - Opportunities to improve quality, quantity of SSFWM's vegetable and timber products
 - Market channels that are used and have potential for SSFWM products

Policy

- Intensive documents review
 - review, analysis of sector policies (directly and indirectly affect the financial, technical, and social viability of VAF technologies)
 - identify existing disincentives, constraints to the adoption of proposed VAF conservation technologies by SSFWM
- Stakeholder analysis
 - Key informants interview
 - Focus group discussions
 - Process documentation/ Participant - observation
 - Stakeholders' Dialogue
 - Identify options for strengthening policy, institutions to promote the adoption and sustainability of VAF systems by SSFWM

Scaling-up

- Training needs analysis (TNA)
- Design of the training/education programs
- Develop/produce instructional materials and manuals
- Conduct savings

Gender

- Identify women's roles in farming and marketing
 - conducted together with the baseline survey and rapid marketing assessment activities.
- key informant interviews
- focus group discussions
- case studies

Environmental & socio-economic impacts

- SWAT model**
 - SWAT training
 - Identify data to be collected
 - data collection
 - Analysis of satellite images; gathering modeling inputs
 - Apply SWAT model, Analyze outputs
- Economic models**
 - Training on modeling
 - Develop/modify economic model
 - Identify data to be collected
 - data collection
 - Apply economic model; Analyze outputs

With VAF case studies

Without VAF case studies

With and without VAFs; Other scenarios