Wild Gardens for Improved Nutrition and Income

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Kampong Cham, Cambodia



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Goal: answer (5) questions

1) What is a Wild Garden?

2) What are wild food plants?

3) How can they be used to improve nutrition, income...?

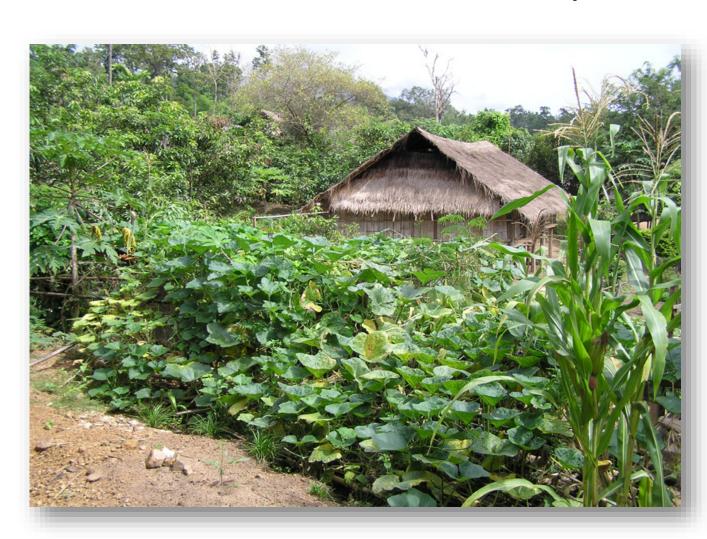
4) Where to establish Wild Gardens?

5) How to establish Wild Gardens

What is a Wild Garden?

Wild Gardens are collections of wild food plants

Homestead (home garden plot)



What is a Wild Garden?

Wild Gardens are collections of wild food plants



Forest plot

What is a Wild Garden?

Wild Gardens are collections of wild food plants



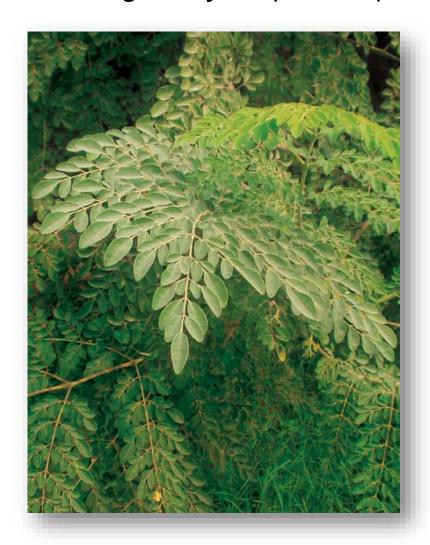
Shared community space

What are wild food plants?

- Species w/ underexploited potential for contributing to food security, health, income generation, and environmental services
- Also called neglected and underutilized species (NUS)

Other examples?

Moringa oleifera (Marum)



Wild food plant examples

- 'Wild Gardens' perennial vegetable species
 - Vegetable fern (Diplazium esculentum), White thorn rattan (Calamus siamensis), Snowflake tree (Trevesia palmata), Red shoot fig (Ficus virens), Fish tail palm (Caryota mitis), Galangal (Alpinia galanga)



Cha Om – Acacia pennata



Leaf Pepper – Piper sarmentosum



Malabar Spinach – Basella alba



Chaya – Cnidoscolus chayamansa



Kang Kong – *Ipomoea aquatica*



Katuk – Sauropus angrogynus

Wild Gardens are collections of wild food plants

 Rural farmers, especially women, usually harvest some wild food plants at some time during the year

Wild Gardens
 are <u>designed</u>
 and <u>managed</u>,
 <u>collections</u> of
 wild food plants



How can Wild Gardens improve household nutrition and increase income?

Wild Gardens are part of a <u>Livelihood</u>
 <u>Strategy</u>

Wild food plants
 are key to small
 farm diversification

Small Farm
 DIVERSIFICATION



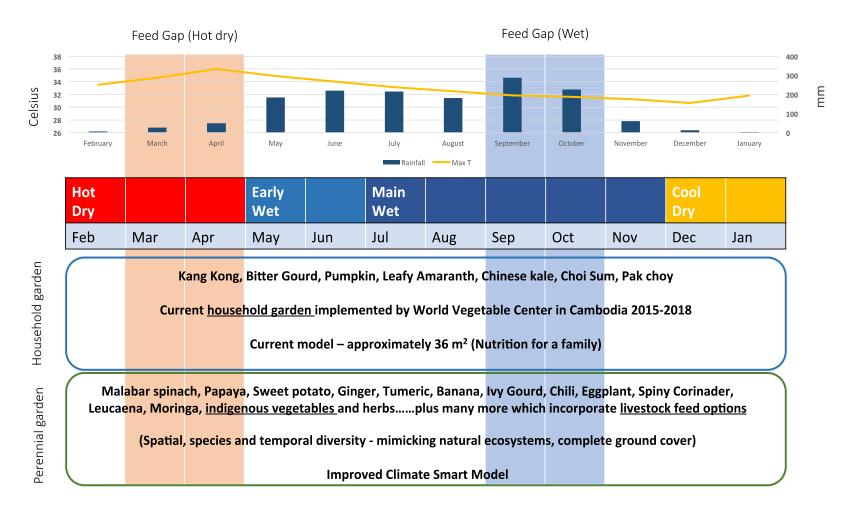
How can we diversify small farms using Wild Gardens?

Focus on <u>TIME</u> (temporal diversification)

Focus on <u>SPACE</u> (spatial diversification)

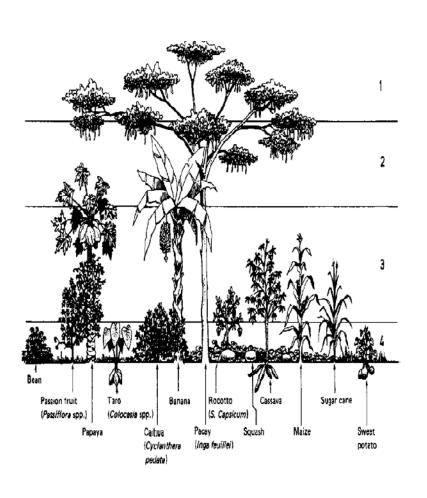
Focus on <u>FUNCTION</u> (functional diversification)

Target rainy-season and dry-season food gaps (temporal diversification)



^{*}Rainy-season vegetable production with perennial wild food plants (poster & handout

Wild Gardens can use <u>all</u> the space on the farm (spatial diversification)



- 1. Mango, Cashew, Neem, Palms
- 2. Papaya, Moringa, Bamboo, Fishtail palm
- 3. Chaya, Katuk, Sa'Om
- 4. Galangal, Vegetable fern, Leaf pepper, Ginger, Tumeric

Wild Garden species can be multifunctional (functional diversification)



Possible uses: human food, livestock food, medicine, local markets, living fence

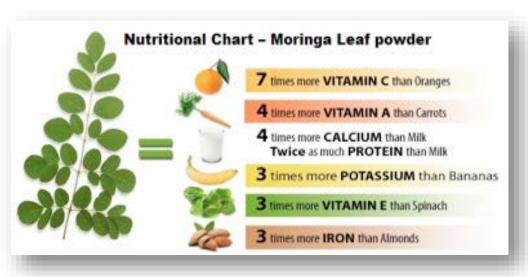
- Gliricidia
- Moringa (Marum)
- Chaya

Gliricidia "Living Fence"

Unlocking the potential of wild food plants

- Nutrition Moringa & others; Kasetsart analysis
- Market income Siem Reap market survey
- Home medicine
- Livestock feed
- Animal containment "Living fence"





Acacia pennata (SaOm) example

 Cash crop; important ir local produce markets

Excellent living fence to protect gardens from livestock

 Very high in beta-Carotene (Vitamin A)





Where to establish Wild Gardens?

Homestead

 Common space in the village, fencerows, weedy patches

 Distant locations, near rice paddy, forests



Where to establish Wild Gardens?

Find <u>Underutilized Space</u> to establish your Wild Garden



Designing Wild Gardens based on specific goals

- Household nutrition
- Market income
- Home medicinal use
- Livestock feed
- Livestock containment
- Mixed use



How to establish Wild Gardens?

- Wild Garden goals
- Develop wild food plant list based on function
- Learn about the plant characteristics and cultural requirements
- Locate plot and source for species and beginning planting



Wild Garden diversity continuum

• Every Wild Garden is different: location, size, species used, species mix, , etc.

There is no define 'recipe' for a Wild Garden

 Every Wild Garden is on a 'diversity continuum' from low to high species diversity

 Start small and work to increase species diversity of your Wild Garden plot

Wild Garden diversity continuum





Low species diversity

High species diversity





 The goal is to improve farmer livelihoods via increased farm biodiversity and enterprise engagement

Plant a Wild Garden Thank you!



