CHAPTER VII

PLANT DIVERSITY IN KAREN HOME GARDENS

7.1 The significance of home gardens for Karen livelihoods

Home gardens, as defined by Soemarwoto (1987), are a system for the production of subsistence crops for the gardener and his family. It can be found immediately surrounding the home or slightly further away, but still near the residential area.

Since fresh markets are unavailable in the study areas, Karen people have home gardens to supplement their food sources. They receive health benefits from many kinds of plants that provide nutrients from their home gardens such as carbohydrates from sweet potato and cassava, vitamins and minerals from greens and fruits, and proteins from beans. Home gardens are the way to utilize empty land around houses and use family labor more efficiency.

Karen home gardens do not have any fixed pattern or system. They cultivate any plants that they like anywhere near their home. They start planting in the early part of the rainy season and do not spend much time on their gardens. After planting, growth depends much on nature. Women usually collect vegetables from their home gardens for family consumption, especially during the wet season while they still collect wild plants from the forest. Some wild plants are propagated in their home gardens for various reasons such as consumption, and ornamentals and cultural use.

7.2 Plant diversity in Karen's home garden

Karen people use indigenous knowledge to propagate many wild plant species. Both men and women are the propagators, but women are more concerned with this than men. I found that women from Chan and Den villages did more wild plant propagation than men. The percent of women propagators from Chan village was more than women from Den and Nong Jet Nuai villages (80, 60, and 30 percent, respectively) while the percent of men propagators from the three villages was the same, *i.e.* 50 percent (Figure 37).

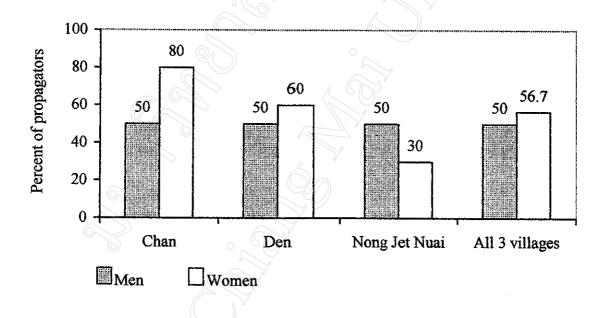


Figure 37. Percent of people propagating wild plants in home gardens from Chan, Den, and Nong Jet Nuai villages.

The total number of species in home gardens in the three villages is at least 90 (Appendix B) including indigenous species, species from development projects, and species from the lowlands. The number of species in home gardens in Chan, Den, and Nong Jet Nuai villages is at least 88, 90, and 72 species, respectively, while 13, 15, and 7 species are wild plant species, respectively (Figure 38).

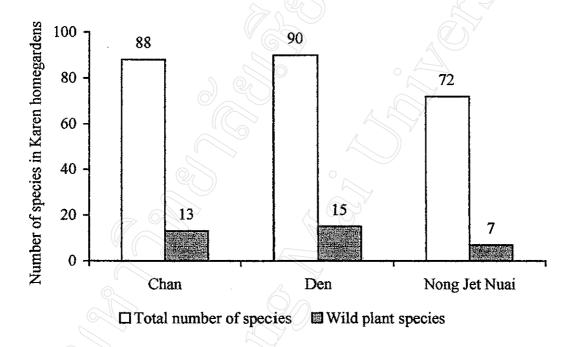


Figure 38. Numbers of home gardens species of Chan, Den, and Nong Jet Nuai villages.

Wild plant propagation in home gardens is done almost exclusively by women especially in Chan and Den villages. Five, eight, and one wild plant species were propagated by women from Chan, Den, and Nong Jet Nuai villages, respectively. While 1, 3, and 3 species of wild plants were propagated by men from these three villages, respectively. Some wild plants were propagated by both men and women 4, 6, and 1 species from the three villages, respectively (Table 20).

Table 20. Number of wild plant species propagated by Karen men and women.

Propagators	Number of wild plant species propagated			
	Chan	Den	Nong Jet Nuai	
Men		/3	3	
Women	5	8	1	
Both	0,4	0 6	1	
Total	10	77	5	

Table 21. List of plant species propagated by Karen people.

Species	Family	Local	Gatherers	Use	#
Phrynium capitatum Willd.	Marantaceae	หล่างรื่อ	MW	•	P
Acacia megaladena Desv. var. megaladena	Leguminosae, Mimosoideae	โพชวีเด๊าะ	W	1	P
Mussaenda parva Wall. ex G.Don	Rubiaceae	ญ່າ	MW		P
Trevesia palmata (DC.) Vis.	Araliaceae) กิลอส่า	MW	9 🖞	P
Baccaurea ramiflora Lour.	Euphorbiaceae	ส่าเปอะจื่อ	MW	5	P
Phoenix loureiri Kuwth var. Loureiri	Palmae	ทาโปล่	W	1	P
Drospyros rhodocalyx Kurz	Ebenaceae	เลโข่หม่อ	M	5	P
Spondias pinnata (L. f.) Kurz	Anacardiaceae	มะกอก	M	1	P
Sauropus androgynus (L.) Merr.	Euphorbiaceae	ต่าเชอเด๊าะ	y M	1	P
Curculigo capitulata (Lour.) O.K.	Amaryllidaceae	โตหน่าอื้	W	4	P
Amomum siamense Craib	Zingiberaceae	เพาะเบื่อย	MW	1	P
Fagopyrum esculentum Moen. *	Polygonaceae	เซอะเด๊าะโข่ถึ่	W	1	A
Houttuynia cordata Thunb. *	Saurauiaceae	คำเนอชีเค้า ะ	W	1	A
Mentha arvensis L. *	Labiatae	พอซิหมื่อ	MW	1	A
Psidium guajava L. *	Myrtaceae	เส่อเกวะโมะ	W	2,5	P
Solanum melongena L. *	Solanaceae	สะกอข่า	W	1	P
Note:					
M = Men $1 = Food$	2 = Medicine		3 = Fodder		
W = Women 4 = Ornament	$5 = \text{Fruit}$ $\bullet = \text{cov}$		• = cover co	oked r	ice
MW = Men and Women					
* = Introduced species long cultivate	d by Karen neonle	e			

⁼ Introduced species long cultivated by Karen people

= phenology P = Perennial A = Annual

All 90 plant species (Appendix B) can be grouped into nine groups by utilization patterns. Karen people used fruits/ seeds more than other plant part (32 species), the next was leaves/ stems (20 species), ornamentals (8 species), roots/ shoots (5 species), and flowers (1 species). Some plants have several useful part such as leaves/ stems and fruits/ seeds (10 species), leaves/ stems and flowers (9 species), leaves/ stems and root/ shoot (3 species), and leaves/ stems, and flowers and fruits/ seed (2 species) (Table 22).

Table 22. Uses of Karen home garden plants.

Plant parts used	Number of species		
Fruits and seeds	32		
Leaves/ stems	20		
Root/ shoot	5		
Flowers	1		
Ornamental	8		
Leaves/ stems and fruits/ seeds	10		
Leaves/ stems and flowers	9		
Leaves/ stems and root/ shoot	3		
Leaves/ stems and flowers and fruits/ seeds	2		