

Roles of Wild Food Plants in Ethnic Group Communities in Mondulhiri Province, Northeastern Cambodia

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Abstract

The present study describes the identification, documentation and ethno-botanical exploration of wild food plants in the Krang Teh and Romonear Communes, Mondulhiri province, northeastern Cambodia. A total of 32 plant species belonging to 25 botanical families were recorded in the study areas. Wild edible fruits comprised the highest proportion of the wild food species (17), followed by wildvegetables (8), and roots and tubers (7). Through focus group discussions with key informants, data on the perception, gathering, preparation and use of 32 wild food plant species was collected. Information on socioeconomic aspects must be taken into account when trying to understand the role of these plants in indigenous and local communities. Wild food plants are traditionally important as a supplement to the diet, particularly during food shortages, when they bring diversity and serve as a source of vitamins and minerals. Many of them play a hidden role in the economy of the rural areas where they are used for many reasons. However, because the nutritional values and possible toxic effects of these plants are not known, the information presented here might be helpful for further studies on nutritional values and possible effects. More attention is needed on sustainable management and market development of these products.

Keywords: wild food plants, indigenous community, ethnobotany, socioeconomic aspects

บทคัดย่อ

การศึกษาที่ได้นำมาเสนอนี้อธิบายถึงการระบุอัตลักษณ์ การจัดทำเอกสารกำกับ และการสำรวจทางพฤกษศาสตร์พื้นบ้านของพืชอาหารป่าในชุมชน (commune) Krang Teh และ Romonear จังหวัดมณฑลศีรี ภาคตะวันออกเฉียงเหนือ ประเทศกัมพูชา มีจำนวนชนิดพันธุ์พืช (plant species) ในพื้นที่วิจัยได้รับการบันทึกทั้งหมด 32 ชนิดพันธุ์ ซึ่งอยู่ในวงศ์ทางพฤกษศาสตร์ (botanical families) 25 วงศ์ ในจำนวนชนิดพันธุ์อาหารป่าดังกล่าวประกอบด้วยผลไม้ป่าที่สามารถกินได้มากที่สุด (17) รองลงมาคือ ผักป่า (8) และส่วนที่เป็นรากและหัวใต้ดินของพืช (7) ตามลำดับ การเก็บข้อมูลโดยการสนทนากลุ่มกับผู้ใช้ข้อมูลสำคัญ ข้อมูลของชนิดพันธุ์พืชอาหารป่าทั้ง 32 ชนิดพันธุ์เก็บรวบรวมจากการรับรู้เข้าใจ การเก็บรวบรวม การเตรียม และการนำไปใช้ ข้อมูลข่าวสารทางด้านสังคมเศรษฐกิจจำเป็นต้องนำมาพิจารณาบทบาทเพื่อทำความเข้าใจถึงบทบาทของพืชเหล่านี้ในชุมชนพื้นเมืองดั้งเดิมและชุมชนท้องถิ่น พืชอาหารป่าเหล่านี้มีความสำคัญต่อท้องถิ่นในฐานะเป็นอาหารเสริม โดยเฉพาะอย่างยิ่งในช่วงที่อาหารขาดแคลน เมื่อนำมารับประทานก็จะเป็นแหล่งวิตามินและแร่ธาตุที่หลากหลาย อีกทั้งพืชอาหารป่าหลายชนิดพันธุ์ยังมีบทบาทที่ซ่อนอยู่ในทางเศรษฐกิจของพื้นที่ชนบทที่ซึ่งนำมาใช้ในหลายเหตุผลด้วย อย่างไรก็ตามเรายังไม่รู้ถึงคุณค่าทางโภชนาการและการมีฤทธิ์เป็นพิษที่อาจมีอยู่ในพืชอาหารป่าเหล่านี้ ดังนั้นข้อมูลข่าวสารที่นำมาเสนอนี้อาจเป็นประโยชน์ต่อการศึกษาคั้งต่อไปถึงคุณค่าทางโภชนาการและการมีฤทธิ์เป็นพิษที่อาจมีอยู่ อีกทั้งการจัดการอย่างยั่งยืนและการพัฒนาตลาดของผลผลิตจากพืชอาหารป่าเหล่านี้จำเป็นต้องได้รับความเอาใจใส่มากยิ่งขึ้น

คำสำคัญ: พืชอาหารป่า ชุมชนพื้นเมืองดั้งเดิม พฤกษศาสตร์พื้นบ้าน แง่มุมทางสังคมเศรษฐกิจ

Introduction

While the world's population is expected to reach 9.2 billion by 2050 (FAO, 2011), it is estimated that over one billion people already suffer from chronic hunger and malnutrition. In many rural areas around the world, plant genetic resources (PGR), particularly underutilized crops and wild food plants, are an essential component of the livelihood strategies of indigenous and local communities (IPGRI, 2002). They are very important in supplementing subsistence agriculture in the developing world during times of drought and food shortage (Guinand

and Lemessa, 2001). Although these species continue to be maintained by cultural preferences and traditional practices, they remain inadequately categorized and neglected by the research and conservation communities. Lack of attention has meant that their potential value is underestimated and underexploited, placing them in danger of continued genetic erosion and eventual disappearance, which would further restrict development options for the poor (Joshi et al., 2002).

In parts of northeastern Cambodia, the consumption of wild food plants is an important local survival strategy, which appears to have intensified because of repeated climatic shocks that have hampered agricultural production and led to food shortages. Increased consumption of wild food plants enables people to better cope with unpredictable rains and drought without facing severe food shortages. The Phoung ethnic minority is well known for its hard labor and complex agriculture, which has recently been affected by drought. Over the past several years this group has faced repeated significant harvest losses and even complete crop failure. Nevertheless, they cope with these harsh conditions and have survived by increasing their consumption of wild food plants. Damaged, reduced, or even lost crop harvests have been partly compensated for by the collection of wild foods. However, while the rich indigenous knowledge about the use of wild plants has been relatively well documented, research concerning the socio-economic, cultural, traditional and nutritional aspects of wild food plants is still lacking. The objectives of this study were to explore and identify wild food plant resources and to learn their role in the communities' life and indigenous knowledge about their utilization.

Materials and methods

Study area

The study was conducted in one of the northeastern provinces of Cambodia, which is a region of high biodiversity for wild food plants. Monduliri is the largest but most sparsely populated province in Cambodia. It has abundant natural resources, with thickly forested

mountains, powerful waterfalls and lush green rolling hills in the west. This area still harbors crop landraces and wild relatives of many different crops that have evolved in Cambodia. Two communes, Trang Teh and Romonea, and four villages were selected in the sub-areas based on their altitude.

The geographical position of the Romonea commune is between $12^{\circ}33'04.7''\text{N}$ to $12^{\circ}29'28.1''\text{N}$ latitude and $107^{\circ}21'15.9''\text{E}$ to $107^{\circ}14'38.9''\text{E}$ longitude. Krang Teh commune is between $12^{\circ}39'59.9''\text{N}$ to $12^{\circ}39'23.4''\text{N}$ latitude and $107^{\circ}21'17.7''\text{E}$ to $107^{\circ}21'06.9''\text{E}$ longitude. The altitudinal range of the communes is from 445 m (Pou Robot) to 727 m (Pou Tang) above mean sea level. Mondulkiri's average temperature throughout the year is lower than that in other areas of Cambodia. The province has three seasons, including the rainy season from June to October ($<25^{\circ}\text{C}$), the cool season from November to February ($>20^{\circ}\text{C}$) and the hot season from March to May with temperatures from 20 to 30°C .

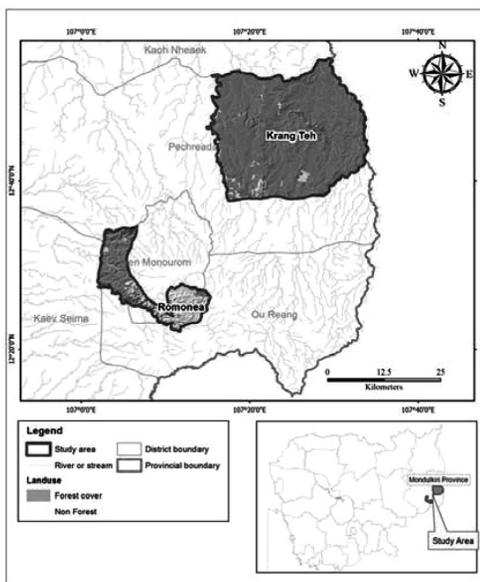


Figure 1. Map of study areas

Field study and data analysis

Information on wild food plants was collected by using focus group discussions and interviewing key informants in the community. Altogether, two focus group discussions were organized in each ward of the communes. The number of participants in each focus group ranged

from 15 to 18. During the first session in each discussion, we asked participants to enumerate all the wild food plants they knew. Plants were listed with common names, local names, and the parts of the plant used. Lists were compiled into one and repetitions were omitted and checked with main references, including (1) the *Dictionary of Plants used in Cambodia* (Dy Phon, 2000), (2) the database of local vegetables in Thailand referenced by JIRCAS (2010), (3) Lao Non-Timber Forest Products Wiki and other sources. In addition, ethnobotanical and socioeconomic information on wild food plants was collected by interviewing local inhabitants using a structured questionnaire. Eighty-six households were selected from a total of 599 in four villages, and the respondents were carefully selected to present perceptions and knowledge of both male- and female-headed households. Descriptive statistics were used to describe the socioeconomic status of households. Rich descriptive, trend and seasonal analysis were used to explain the role of wild food plants in these communities.

Results and discussion

Information was obtained on 32 species of wild food plants belonging to 25 botanical families. The plants were classified into crop groups comprised of seven species of roots and tubers, eight species of wild vegetables and 17 species of wild fruits. Information on these wild food plants is presented below.

Root and tuber wild food plants

Many wild root food plants are drought tolerant and can remain intact in the soil for a long time. Therefore, they can be collected when the need is greatest. In Krang Teh and Romonea communes, typical root wild food plants that grow naturally in the forest include the following: *Dioscorea alata* (Khmer: *damloong chhiem moen*), *Dioscorea esculenta* (Khmer: *damloong sya*), *Dioscorea pentaphylla* (Khmer: *damloong tuk*), and *Dioscorea hispida* (Khmer: *khuech*). Among them, *Dioscorea hispida* tubers contain a poison that must be removed before

they can be eaten. *Khuech* starch is used to make sweets and is usually eaten with rice, while the tubers also have several medicinal qualities. *Khuech* tubers are eaten as a substitute for rice during times of food shortages. Similarly domesticated forms of *D. alata* and *D. esculenta* are grown and used for the same purposes. *Alpinia galangal* and *Kaempferia galanga* are called “greater galangal” and “wild ginger.” Farmers explained that they are eaten as ingredients with other food sources and also use for traditional medicine.

Table 1. List of wild root and tuber food plants

Scientific name	Family name	Common name	Local name (in Khmer)	Part of plant used
<i>Alpinia galangal</i> L.	Zingiberaceae	galangal	<i>rumdaeng prey</i>	root/tuber/ stems
<i>Dioscorea alata</i> L.	Dioscoreaceae	purple yam/ white yam	<i>damloong chhiem moen/damloong phluk</i>	root/tuber
<i>Dioscorea brevipedicelata</i>	Dioscoreaceae	n/a	<i>damloong tien</i>	root/tuber
<i>Dioscorea esculenta</i>	Dioscoreaceae	chinese yam, asiatic yam, lesser yam	<i>damloong sya/ damloong dong/ daloong chhvie prey</i>	root/tuber
<i>Dioscorea pentaphylla</i> L.	Dioscoreaceae	n/a	<i>damloong tuk</i>	root/tuber
<i>Dioscorea hispida</i> Dennst.	Dioscoreaceae	n/a	<i>khuech</i>	root/tuber
<i>Kaempferia galangal</i> Linn.	Zingiberaceae	wild ginger, sand ginger	<i>khnhy prey</i>	root/tuber

Wild vegetables for food

Most wild vegetables are leafy types that sprout and flourish after the rains. They generally mature within a short period of time (about two weeks) and include species such as *Azadirachta indica*, *Coccinia grandis*, *Cratogeomys formosum*, *Melientha suavis* and *Oenanthe javanica*. People try, whenever possible, to add wild foods to local staple foods or to mix it with other food stuffs to enhance the fragrance

and flavor of the food.

Table 2. List of wild vegetable species for food

Scientific name	Family name	Common name	Local name (in Khmer)	Part of plant used
<i>Azadirachta indica</i>	Meliaceae	neem tree, Indian lilac	<i>phak sdau</i>	flowers/young leaf shoots
<i>Bambusa vulgaris/Phyllostachys edulis</i>	Poaceae/ Bambusoideae	bamboo	<i>tumpuamng/russey</i>	young shoots
<i>Coccinia grandis</i>	Cucubitaceae	scarlet-fruited gourd, perennial cucumber	<i>sleuk bah</i>	young leaf shoots
<i>Calamus spp.</i>	Arecaceae	rattan	<i>phdau</i>	young shoot
<i>Cratogeomys formosum</i>	Guttiferae	n/a	<i>longieng</i>	young leaves and flowers
<i>Melientha suavis</i>	Opiliaceae	<i>phak-wanpa</i> in Thai, <i>phak van</i> in Lao	<i>slerk prich</i>	fruit/young shoots
<i>Oenanthe javanica</i>	Umbelliferae	water dropwort, water celery	<i>phouv kangkep</i>	Whole
<i>Vigna minima</i>	Fabaceae	wild cowpea	<i>sanneak prey</i>	young fruit/ flowers

Wild vegetable species are consumed mainly at times of food stress and are therefore an indicator of food crisis conditions. For instance, the consumption of wild vegetables and other plants seems to be one of the important local survival strategies and appears to have intensified due to the repeated climatic shocks that have hampered agricultural production and lead to food shortages. Eating these plants adds crucial vitamins to diets that are normally deficient, particularly for children. The Phnong minority group still uses well-developed knowledge concerning the question of which wild vegetable species can best provide dietary supplements in periods of food shortage. These people have managed to cope with severe food shortages caused by

climatic conditions by increasing their consumption of wild food plants, including wild vegetables. Damaged, reduced or even lost crop harvests have been partly compensated for by the collection of wild foods. Among them, *Calamus spp.*, *Coccinia grandis* and *Bambusa vulgaris/Phyllostachys edulis* are most commonly used, not only in time of food shortage, while *Vigna minima* and *Cratoxylum formosum* are used only occasionally by villagers.

Wild fruit species

The use of wild fruits is a component of local responses to increasing food insecurity and is one of the major coping mechanisms at times of food shortage (Bell, 1995). Underutilized wild fruits remain one of the major options for coping with hunger and nutritional deficiency in the diets of poor rural people. Studies have shown that harvesting fruits from the wild and also from semi-domesticated trees growing on farms can enhance rural employment and generate substantial income (Leakey et al., 2005).

Table 3. List of wild fruit species

Scientific name	Family name	Common name	Local name (in Khmer)
<i>Acronychia pedunculata</i>	Rutaceae	n/a	<i>seda prey/ tramal</i>
<i>Artocarpus rigidus</i>	Moraceae	monkey-jack	<i>khnao prey</i>
<i>Baccaurea ramiflora</i>	Phyllanthaceae	burmese grape	<i>Phnhiew</i>
<i>Dialium cochinchinensis</i>	Leguminosae	velvet tamarind	<i>Lralanh</i>
<i>Dillenia indica</i> L.	Dilleniaceae	elephant apple	<i>dak chan/phlul vieng</i>
<i>Dillenia ovate</i>	Dilleniaceae	ovate dillenia	<i>phul thom</i>
<i>Diospyros hasseltii</i>	Ebenaceae	n/a	<i>tubloab prey</i>
<i>Garcinia cowa</i>	Guttiferae	n/a	<i>tromoung/tromeng</i>
<i>Garcinia schomburgkiana</i>	Guttiferae	n/a	<i>Sandan prey</i>
<i>Mangifera duperreana</i>	Anacardiaceae	wild mango	<i>svay prey</i>
<i>Nephelium hypoleucum</i>	Sapindaceae	Korlan	<i>se moen</i>
<i>Passiflora foetida</i> L.	Passifloraceae	passionflower, wild water lemon	<i>saou maou prey</i>

Scientific name	Family name	Common name	Local name (in Khmer)
<i>Phyllanthus emblica</i> L.	Phyllanthaceae	Indian gooseberry	<i>kantuet prey</i>
<i>Spondias malayana</i>	Anacardiaceae	n/a	<i>mkak prey, puen</i>
<i>Syzygium</i> spp.	Myrtaceae	Java plum, jambolan	<i>pring dahs krabei</i>
<i>Terminalia chebula</i>	Combretaceae	chebolic myrobalan	<i>Sramar</i>
<i>Willughbeia edulis</i> Roxb	Apocynaceae	<i>kuy</i> (in Khmer), (<i>gedra- phol</i> (in Thai)	<i>Kuy</i>

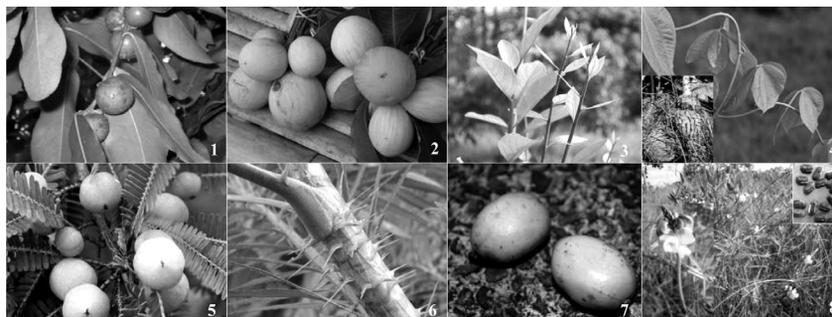


Figure 2. Some important wild food plants used in the study area: (1) *Diospyros hasseltii* (2) *Willughbeia edulis* (3) *Melientha suavis* (4) *Dioscorea hispida* (5) *Phyllanthus emblica* L. (6) *Calamus* spp. (7) *Spondias malayana* and (8) *Vigna minima*

In Krang Teh and Romonea communes, people usually collect and consume available wild fruits from the forest that are widely available in the dry season, some of which are also available throughout the year. Children and women play an important role in gathering wild food plants that grow far from the village (Table 3). Fruits plus one or more additional food product, such as leaves and tender parts of stalks and/or root parts, can be used at different times of the year and at different stages of food shortage. People in drought-prone areas of Mondulkiri province especially practice these habits of consuming the fruits and young leaves. Native edible wild fruits can play a crucial role in combating food insecurity, especially the hidden hunger caused by micronutrient vitamin and mineral deficiencies. Greater use of indigenous wild fruits could do much to combat malnutrition, boost food security and contribute to income generation.

Cultivated crops and cropping systems

Rice is the primary agricultural product for the communities, who grow both paddy (lowland) and upland rice. Currently, villagers grow paddy rice in permanent sites, whereas previously shifting cultivation was common. They said this change was primarily due to population growth and the fact that the harvest from their shifting agriculture was not sufficient to feed the increased population. Only one rice harvest a year is possible as it depends solely upon rainwater. The fields are dry for about six months each year. Villagers use traditional agricultural tools for cultivation.

Cassava plantations were also being introduced to the area and several farmers had tried planting varieties that are used for flour production. According to the farmers, however, and much to their disappointment, this project had not been profitable due to low prices and lack of markets. Nevertheless, farmers in Krang Teh, Pu Robet and Pu Tang villages are quickly adopting cassava to grow on a large scale. Other important crops were maize and groundnuts, but these were planted mostly in upland fields (*chamka*) or farms near houses, streams or rivers. Maize is planted in small quantities and mostly as a subsistence crop. Groundnuts, on the other hand, were planted on a larger scale as a cash crop, and were found abundantly in Krang Teh and Pou Robet villages. Groundnuts were grown during the early rainy season from May to July.

Vegetables were planted primarily on upland farms or fields and along stream banks. The vegetables commonly planted were pumpkin, cucumber, gourd, wintermelon, eggplant, cowpea/long bean, tomato, chili and sesame seed. Similar to maize, these vegetables are grown in small quantities and mainly for household use in addition to being sold in the local markets. Villagers also planted papaya and banana trees to generate income. Taro and sweet potato growing has become popular in Pu Loung and Pu Tang due to market demand. Rubber and cashews are also being grown; consequently, more and more forests along the roads were being cleared for rubber and cashew plantations.

The survey showed that nearly 78 percent of the households in the study (22.09 percent in Pou Loung, 22.09 percent in Krang Teh, 20.93 percent in Pou Tang and 9.3 percent in Pou Robet village) respectively planted local seed in the 2011 cropping season (Figure 3). Large-scale cultivated areas were covered or planted with local seeds of rice, maize, legumes, root and tuber crops, and indigenous vegetables. The majority of the farmers used local seeds because of insufficient knowledge about improved seeds resulting from inadequate demonstration trials on farmer's plots of new agricultural technology packages.

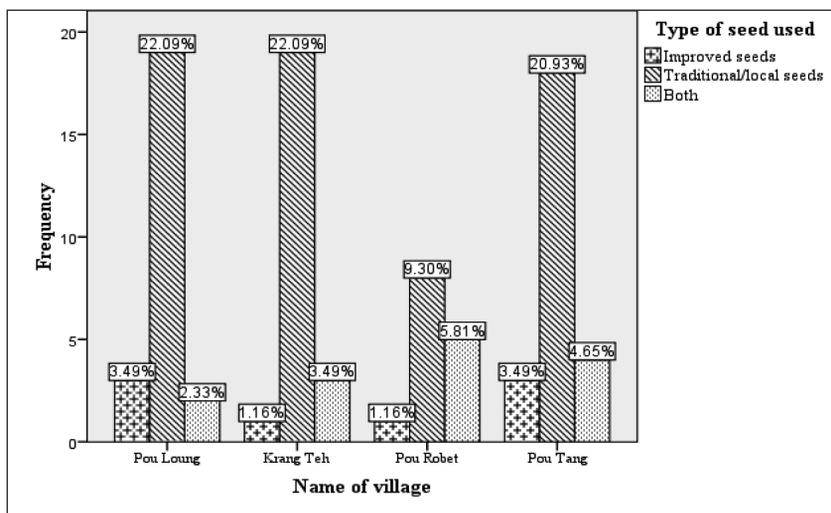


Figure 3. Type of seed used

The Phnong minority group has a traditional subsistence way of life and a high dependence on natural resources from the area. Subsistence activities include *chamkar* farming, hunting and NTFP collection, including wild vegetable and fruits. The people have retained traditional agricultural practices and have only slowly adopted new technology. A diversity of underutilized crops was found in many research areas, especially during the wet season. Many local crops, such

as pumpkin, wintermelon, taro, sweet potato, legume and banana, have good yield. However some improved rice and maize seeds are being introduced by MAFF and NGOs because of the low yield of certain local varieties.

The role of wild food plants during food shortages

Indigenous people living in certain areas use wild food plants or plant parts to fulfill their nutritional needs and often have considerable knowledge of how to use them. People generally depend on nearby forest areas to supply their wild food needs. Diverse wild plant genetic resources are used for food (vegetables and fruits), timber, fuelwood and medicines. Wild food plants remain one of the major options for coping with hunger and nutritional deficiency in the diets of poor rural people. According to results of the survey, all respondents gather these plants from the forest to use for many purposes.

Rice is a staple crop that is consumed as the main food in the daily diet in the research areas. The Phnong people continually experience poor rice yield and most respondents (74.4 percent) claimed not to get sufficient production even though farm size was comparatively large at 1.62 hectares. Most of the families who experienced production shortages had more than six members. The survey indicates various views on why they use wild food plants. Food shortage (74.4 percent) is a common answer because of many constraints in crop production, particularly rice. Another reason for using wild plant foods is tradition or customary practice (65.1 percent), followed by an abundance of wild food plants (60.5 percent), free from chemical spray (60.5 percent), good taste (53.5 percent), and high nutritious value (46.5 percent). Among the respondents, 37.2 percent used wild food plants to generate income (Figure 3).

Table 4. Reasons for using wild food plants (WFPs)

Reason for using WFPs	Number of households	Percentage
Food shortage	64	74.4
Tradition/custom	56	65.1
No chemical spray/natural products	52	60.5
Available in the areas/abundant	52	60.5
Delicious and appealing taste	46	53.5
Nutritious	40	46.5
Income generation	32	37.2

Multiple responses

Generally, people collect wild food plants (97.7 percent) for their own use, use especially for food consumption. Some plants were not sold for several reasons, including the following: the amount gathered was only sufficient for family consumption (55.8 percent), the price was low (75.6 percent), it was difficult to access markets (41.9 percent), the plants were not popular among consumers (14 percent) and they are commonly available (11.6 percent).

Table 5. Reasons for not selling wild food plants

Reason not sold WFP	No. of households	Percentage
Only sufficient for family consumption	48	55.8
Not popular among consumers	12	14.0
Much supply/much availability	10	11.6
Low price	65	75.6
Difficult access to market	36	41.9

Multiple responses

The hidden economic value of wild food plants

Wild food plants that serve as alternatives to staple foods during periods of food deficit are a valuable supplement for a nutritionally balanced diet. Moreover, they are one of the primary alternative sources of income for many resource-poor communities. Several wild food plants, such as edible wild fruits and nuts, wild vegetables, roots, and tubers have

marketing potential. Although many wild food plants are much appreciated by villagers, lack of research into their potential and lack of developed markets mean that they remain marginal plants. As is the case with other Non-Timber Forest Products (NTFPs), markets may need to be developed through a major educational effort in conjunction with marketing activities.

The study showed that the major livelihood strategies of all four villages are farming (48 percent), NTFP collection (24 percent), farm labor (12 percent), fishing (8 percent) and animal husbandry (6 percent). Villagers also collect dry and wet resins and honey, gather rattan and other vines, use handicrafts to make such items as baskets, and engage in wildlife hunting and collecting edible wild fruits. Unlike trends in farming and fishing, NTFP activities have been increasing and providing improved contributions to total incomes throughout the year in the research areas. Wild vegetables and fruits were harvested for household use and sometimes also sold in the local market. Fuelwood, grass, bamboo and wood for house construction were other products collected for non-commercial purposes.

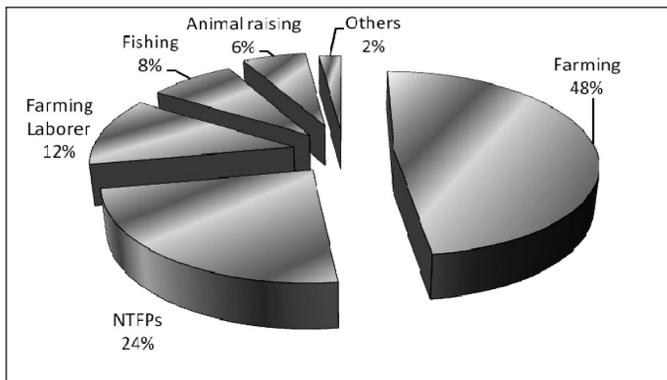


Figure 4. Source of income

Regarding the focus group discussions and observation in the local markets, it was found that some wild food plants are used to generate income among the Phnong minority group (Table 6). Many of

the plants play a hidden role in the economy of rural areas. For example the people of this group harvest and collect the underutilized crops, including wild food plants, and sell them in the local markets. The money generated is used to buy ingredients for meals, clothes, and other household goods. Marketing underutilized crops and wild food plants successfully in rural areas depends on developing centralized processing facilities. These facilities could handling, washing, drying, grading, and sifting wild plants in bulk to add value to the products. The facilities also could be used to process and market local and regional farm crops and provide educational opportunities.

Table 6. Wild food plants sold in the local market by villagers

Scientific name	Common name	Local name (Khmer)	Season availability
<i>Alpinia galangal</i> L.	galangal	<i>rumdaeng</i>	1-12
<i>Dioscorea</i> spp.	wild yam	<i>damloung prey</i>	1-12
<i>Kaempferia galangal</i> Linn.	wild ginger	<i>khnhy prey</i>	1-12
<i>Azadirachta indica</i>	Indian lilac	<i>phak sdau</i>	1-10
<i>Bambusa vulgari</i> / <i>Phyllostachys edulis</i>	bamboo	<i>tumpuamng</i>	5-7
<i>Coccinia grandis</i>	perennial cucumber	<i>sleuk bah</i>	5-10
<i>Calamus</i> spp.	rattan	<i>phdau</i>	1-12
<i>Cratoxylum formosum</i>	mempat tree	<i>longieng</i>	-
<i>Melientha suavis</i>	sweet vegetable	<i>slerk prich</i>	1-3
<i>Oenanthe javanica</i>	water dropwort	<i>phouv kangkep</i>	5-9
<i>Baccaurea ramiflora</i>	Burmese grape	<i>phnhiew</i>	4-5
<i>Dialium cochinchinensis</i>	velvet tamarind	<i>lralanh</i>	5-6
<i>Nephelium hypoleucum</i>	korlan	<i>se moen</i>	4-5
<i>Phyllanthus emblica</i> L.	Indian gooseberry	<i>kantuet prey</i>	11-12
<i>Spondias malayana</i>	na	<i>mkak prey, puen</i>	9-12
<i>Syzygium</i> spp.	Java plum	<i>pring</i>	4-5
<i>Willughbeia edulis</i>	<i>kuy</i> (in Khmer) <i>gedraphol</i> (in Thai)	<i>kuy</i>	4-5

Conclusion

This study provides information on wild food plants used by people of Krang Teh and Romonear communes, Mondulkiri province, northeastern Cambodia. Focus group discussions revealed a list of 32 plant species and their different uses. The results from the ethnobotanical and socioeconomic survey showed that many rural communities rely on wild food plants as substitute food sources and also as a way of generating cash income. The nutritional values and possible toxic effects of these plants are not known. Therefore, the information presented here might be helpful for further studies on the nutritional value of plants. More attention should be given to sustainable management and sustainable harvesting of wild food plants.

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