

Indigenous Fruits Marketed in Aborlan Public Market, Aborlan, Palawan

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ABSTRACT

This study was conducted to describe the demographic characteristics of indigenous fruit sellers; generate data on species, harvest/market season, sources, time availability and volume sales of indigenous fruits sold in the Aborlan Public Market and to determine the problems encountered by the indigenous fruit sellers.

The indigenous fruits marketed in Aborlan Public Market were: "anonas" (*Annona reticulata* Linn), "badak" (*Artocarpus champeden*), "kandis" (*Garcinia lateriflora*), "durian" (*Durio zibethinus* Murr.), "guatis" (*Annona squamosa* Linn), "marang" (*Artocarpus odoratissima* Blanco), "manti" (*Nephelium* sp.), "rimas" (*Artocarpus altilis*), "seryali" (*Flacourta indica*) and "tabo" (*Willughbeia* sp.). Most of the fruits came from different barangays of Aborlan, Palawan while others came from Rizal, Palawan. "Manti" and "tabo" were available in market from June to November while "guatis" fruits were sold only from September to October. Other indigenous fruits were available only for one month. These fruits were commonly sold during Sundays except for "guatis" and "tabo". The problems encountered by the respondents were: difficulty in transporting their products, lack of storage facility, price fluctuation, unfavorable climatic condition and low price of indigenous fruits.

Keywords: indigenous fruits, Aborlan, Palawan, fruit sellers

INTRODUCTION

Indigenous fruit trees play a vital role in livelihood security for many rural community members especially during periods of famine and food scarcity (Saka *et al.* 1994).

Indigenous fruit trees are important traditional sources of nuts, fruits, spices, leafy vegetables, edible oil and beverages. Like vegetables, indigenous fruit trees provide vitamins and minerals essential for the proper maintenance of human health (Okafor 1985). According to Maghembe *et al.* (1994), the nutritional value of indigenous fruit bearing tree species indicates that many are rich in sugar, essential vitamins and minerals while others are high in vegetable oil and protein.

Of the more than 8,000 species of flowering plants recorded in the Philippines, about 200 indigenous or introduced fruit trees and shrubs were domesticated and have gained popularity among Filipinos. Of this number, five are categorized as major fruits since they contribute substantially to the country's domestic and foreign markets. Among them are mango, banana and pineapple. Forty to fifty percent are considered minor or promising fruits since they have potential for development for local and foreign markets. Many of these fruits are still abundant and widely distributed throughout the country. The less-known trees, on the other hand are of limited occurrence, and many are now rarely found even in their original habitats (Madulid, 2003).

Some of the promising indigenous Palawan fruits which may not be too familiar to the urban or young people are the following: "durian" (*Durio zibethimus* Murr), "manti" (*Nephelim sp.*), "marang" (*Artocarpus odoratissimus* Blanco.), "anonas" (*Annona reticulate*), "badak" (*Artocarpus champeden.*) and "rimas" (*Artocarpus artilis*).

Palawan is endowed with rich natural resources specifically forest and marine resources. Part of these forest resources are the indigenous fruits which are also consumed as food especially by those living near the forest. However, it has been observed that there are indigenous fruits gathered and marketed in Aborlan, Palawan which were not properly identified. Hence, this study.

METHODOLOGY

A total of 25 indigenous fruit sellers in the Public Market of Aborlan, Palawan from June 2007 to January 2008 were personally interviewed using a structured interview schedule.

The data gathered were the respondents' demographic characteristics (age, sex, address, total annual income and annual income from selling indigenous fruits), mode of selling, market outlet and nature of selling and the available indigenous fruits in the market including its source, time availability, volume sold and selling price.

Data were summarized and presented in tabular form and analyzed using statistical tools such as frequency count, percentage, range, total and average.

RESULTS AND DISCUSSION

Demographic Characteristics of the Respondents

The age of the indigenous fruit sellers ranged from 21-60 years old with an average of 38.92 years. Most (36%) of them are 31-40 years old while the least of them (16%) are 51-60 years old. This implies that the sellers are still middle-aged and very much strong for this kind of business. Majority (92%) of them are females while only 8% are males.

The sellers reside in Cabigaan (24%) and Mabini (20%) while the rest come from other barangays of Aborlan except for one seller who resides in Narra, Palawan. Annual income from all sources ranged from P30, 000.00-39,000.00. Majority (80%) had P30, 000.00-34,000.00 while the least (20%) had P35, 000.00-39,000.00 annual income. Their average annual income from all sources is P32, 000.00. With regards to their annual income from selling indigenous fruits, most (23 or 92%) of the sellers earned P1, 000.00-4,200.00 while only two (8%) of them had P4,300.00-5,000.00 income. The average annual income derived by the sellers from selling indigenous fruits is P2, 508.00.

Selling Information

Majority (96%) of respondents sold their products on retail basis while the least (36%) of them sold on wholesale basis. Likewise, most (96%) of them marketed their products in Aborlan Public Market while others (12%) marketed their products within the barangay and only one (4%) respondent sold fruits in Puerto Princesa City. The respondents sold their products on per piece basis (68%) and per kilogram basis (52%) (Table 2).

The ten (10) indigenous fruits marketed in Aborlan Public Market were Anonas, Badak, Kandis, Durian, Guatis, Marang, Manti, Rimas, Seryali and Tabo (Table 3).

Table 1. Demographic characteristics of the respondents.

Characteristics	Frequency (n=25)	Percentage (%)
Age		
21-30	4	16.00
31-40	9	36.00
41-50	8	32.00
51-60	4	16.00
Average	38.92 years	
Sex		
Male	2	8.00
Female	23	92.00
Address		
Barake	1	4.00
Cabigaan	6	24.00
Gogognan	1	4.00
Iraan	1	4.00
Mabini	5	20.00
Magbabadil	3	12.00
Magsaysay	1	4.00
Narra	3	12.00
Aborlan Proper	1	4.00
Sagpangan	2	8.00
Tagpait	1	4.00
Annual income from all sources		
30,000.00-34,000.00	20	80.00
35,000.00-39,000.00	5	20.00
Average	P32,000.00	
Annual income from selling indigenous fruits		
P1,000.00-1,700.00	6	24.00
1,800.00-2,500.00	9	36.00
2,600.00-3,400.00	4	16.00
3,500.00-4,200.00	4	16.00
4,300.00-5,000.00	2	8.00
Average:	P2,508.00	

Table 2. Distribution of the respondents according to nature of sale, market outlet and mode of selling.

Information	Frequency (n=25)*	Percentage (%)
Mode of selling		
Retail	24	96.00
Wholesale	9	36.00
Market outlet		
Within the barangay	3	12.00
Aborlan Public Market	24	96.00
Puerto Princesa City	1	4.00
Nature of selling		
Per piece	17	68.00
Per kilogram	13	52.00

* Multiple Responses

**Source, time availability, volume sales and selling price
of indigenous fruits sold**

Among the ten (10) indigenous fruits marketed in Aborlan Public Market from June 2007 to January 2008, "manti" (*Nephelium Sp.*) had the highest volume of sales with a total of 67,700 pieces sold at 100 pieces for P20.00 or P0.20 per piece. Sources of "manti" were mostly from nearby barangays of Aborlan with majority of supply coming from Barangay Magbabadil, Aborlan. The fruits were available in the market from June to November 2007 (Table 3)

Likewise "tabo" were on sale from June to November 2007 with total volume sales of 960 pieces sold at 4 pieces for P20.00 or P5.00 per piece, coming from Barangay Sagpangan and Cabigaan. On the other hand, a total of 10 pieces of "rimas" from Barangay Magsaysay were sold in September 2008 at P15.00 per piece. "Seryali" coming from Barangay Cabigaan sold at 50 pieces for P5.00 that generated a total volume sales of 400 pieces were available in the market in August 2007 "Kandis" that came from Barangay Sagpangan generated a total volume sales of 100 pieces in August 2007 which were sold at 25 pieces for P5.00. A total of 105 pieces "guatis" from Poblacion and Barangay Tagpait was sold at P20.00 per kilogram while 20 pieces of "Anonas" from Barangay Gogognan were sold at P5.00 each on January 2008.

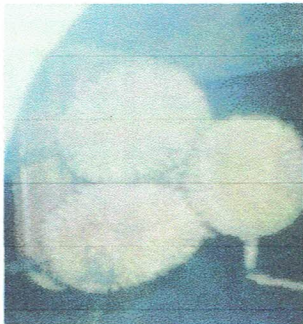
Other species of fruits such as "badak" (55 pcs sold at 3 pcs for P20.00) and "marang" (12 pieces sold at P30.00 each) came from Rizal, Palawan while "durian" (18 pcs sold at P70.00/kg.) came from Barangay Cabigaan and Rizal town. Moreover, barak, marang and durian were offered for sale in September 2007.

Data show that not all of the indigenous fruits marketed in Aborlan Public Market are gathered from Aborlan, Palawan. Fruits like "marang", "badak" and "durian" came from Rizal, Palawan. Also, it can be noted that most of these fruits were marketed during Sundays which is the market day or "tabuan" in Aborlan.

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Table 3. Indigenous fruits marketed in Aborlan Public Market from June 2007-January 2008.

Local Name	Appearance	Scientific Name	Family Name	Description	Economic Importance
Anonas		<i>Annona reticulata</i> Linn.	Annonaceae	The skin of the fruit is reddish-brown in color and with hexagonal lines. The flesh contains brown seeds and is yellowish-white with granular texture.	Edible fruit
Badak		<i>Artocarpus champeden</i>	Moraceae	The fruit is called a syncarp. It is small, oblong and jackfruit-like without pyramidal spines. It is a multiple fruit, when opened shows a fleshy receptacle and numerous carpels fused together.	Edible fruit

Kandis		<i>Garcinia lateriflora</i>	Guttiferae	The fruit is a berry 3-4 cms. in diameter with numerous seeds. It is small, acid fruit with varying degree of sweetness and a melting mangosteen-like texture and flavor.	Edible fruit
Durian		<i>Durio zibethinus</i> Murr	Bombacaceae	The fruit is round or ellipsoid rather large (15 to 25 cms. long) and weighing as much as 3 kilograms or more. Its hard rind is covered with short, stubby, extremely hard pyramidal sharp spines called "duri" hence called durian.	Edible fruit

Guatis		<i>Annona squamosa</i> Linn	Annonaceae	The fruit is a cross between guyabano and atis fruit. It has a scaly skin and almost round and about 10 cms. wide. It has lemony, milky and tart taste.	Edible fruit
Marang		<i>Artocarpus odoratissima</i> Blanco	Moraceae	The fruit is large averaging about 10 cms. long and sometimes weighing 1,000-1,800 grams. It is roundish oblong, thickly studded with short brittle greenish yellow spines. The rind is thick and fleshy. The flesh is snowy white, very sweet, juicy and aromatic.	Edible fruit

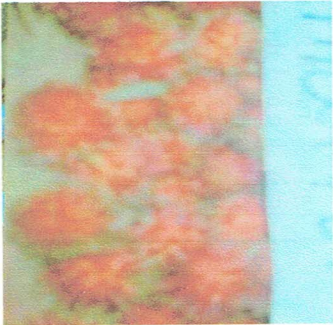
Manti		<i>Nephelium Sp.</i>	Sapindaceae	The fruit grows in terminal, loose clusters of 10-13 fruits and signal ripeness by turning red and yellow. Each one is 5-6 cms. long, surrounded by short to long soft spines. A pinch opens the skin to reveal the pearly white, translucent flesh which may be thin or thick, dry to very juicy, acid to very sweet.	Edible fruit
Rimas		<i>Artocarpus altilis</i>	Moraceae	The fruit grows one, two or sometimes three together, are green when young, and greenish yellow when ripe. The rind is thin and smooth although its surface is marked by polygons. The pulp is slightly fibrous, firm, mealy, pale yellow or whitish, and with a mild sweetish flavor when ripe. It is seedless.	Edible fruit

Table 4. Source, time availability, total volume of sales and selling price of indigenous fruits sold in Aborlan Public Market from June 2007 to January 2008.

Species/Name	Total volume of sales	Selling price (P)	Source of fruits	Time availability (day)	Time availability (Month)
Anonas	20	P5.00 each	Gogognan	Saturday	January
Badak	55	3 for P20.00	Rizal	Sunday	September
Kandis	100	25 for P5.00	Sagpangan	Sunday	August
Durian	18	P70 per kilo	Cabigaan Rizal town	Sunday	September
Guatis	105	P20 per kilo	Poblacion Tagpait	Wednesday Sunday	September- October
Marang	12	P30 each	Poblacion Tagpait	Sunday	September
Manti	67,700	100 for P20	Magbabadil Barake Iraan San Juan Mabini Gogognan Sagpangan Poblacion Sandoval Magsaysay	Sunday	June - November
Rimas	10	15.00 each	Magsaysay	Sunday	September
Seryali	400	50 for P5.00	Cabigaan	Sunday	August
Tabo	961	4 for P20.00 (P5.00)	Sagpangan Cabigaan	Sunday	June- November

Problems Encountered by the Respondents

Based on the multiple responses of the respondents, the problems they encountered were: difficulty in transporting their products (88%), lack of storage facility (68%), price fluctuation (64%), unfavorable climatic condition (40%), and low price of fruits in the market (16%) (Table 5).

Table 5. Problems encountered by the respondents.

Problem	Frequency (n=25)	Percentage (%)
Difficulty in transporting their products	22	88
Lack of storage facility	17	68
Price fluctuation	16	64
Climatic condition	10	40
Low price	4	16

Conclusion

The indigenous fruits identified in Aborlan Public Market are native to Palawan and the Philippines. These fruits can be potential source of food in times of food crisis. Hence, information about them must be fully disseminated and strictest measures must be employed to conserve them.

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