

PalArch's Journal of Archaeology of Egypt / Egyptology

Eating Lifestyle Assessment of AgtaDumagats at Brgy.Malinao, Gabaldon, Nueva Ecija, Philippines: A Basis for an Extension Program

¹ *May Nerissa S. Lopez*, ² *Dr. Marivic N. Villegas*

¹ College of Hospitality Management, Nueva Ecija University of Science and Technology, Nueva Ecija,
Philippines

² Extension Director, Nueva Ecija University of Science and Technology, Nueva Ecija, Philippines

May Nerissa S. Lopez, Dr. Marivic N. Villegas: Eating Lifestyle Assessment of AgtaDumagats at Brgy.Malinao, Gabaldon, Nueva Ecija, Philippines: A Basis for an Extension Program-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(9). ISSN 1567-214x

Keywords: AgtaDumagats, Eating Lifestyle Assessment, Food Cultural Practices, Extension Program

ABSTRACT

The purpose of this study is to document the eating habit/lifestyle of AgtaDumagats in Gabaldon, Nueva Ecija, Philippines. Thus, can be a baseline for further research about their food ways and be a basis for an extension program. Quantitative and qualitative description design of research was used in this study. Respondents were chosen with the use of purposive sampling technique. Collection of data was through the use of survey questionnaire and face to face interview. The respondents of this study were the 80 AgtaDumagats of Malinao. Questionnaire was validated by content validity, referring to the expert on the field and pilot testing to ensure its reliability and validity. As a faculty of Hospitality Management and Director of Extension Services Department of the university, the scenario struck the chord of the researchers to come up with the study of assessing the food culture of AgtaDumagats which for the future research, be a basis for appropriate extension program in which the NEUST can extend to the AgtaDumagats community; in doing so, the Local Government Unit and the academe can work hand in hand in coming up with an intervention program in addressing food insecurity of the indigenous people.

1. Introduction

The AgtaNegritos of the Philippines consist of eleven languages groups, numbering in the total about 10,000 people. They are traditionally nomadic hunters gather living in small temporary camps widely scattered over several thousand square kilometers of dense rainforest in the Sierra Madre of Eastern Luzon. (Early and Headland, 1998). The most salient activity of Agta men is hunting wild pig, deer and monkey with bow and arrow. They trade most of the meat they catch and forest products they gather to nearby farmers in exchange of starch foods and other trade goods. They also work as seasonal laborers for other farmers. Much of their time is spent in collecting forest products for trade, wild game, rattan, honey, tree resin, and orchids (Headland, 1998).

AgtaDumagat or the Indigenous People are normally found scattered in the mountain trenches of Mt. Mangan in Gabaldon, Nueva Ecija. They are profusely living peacefully on Sitio's in which legally declared as their ancestral domain. Nonetheless, in the municipality, majority of their populace are located in the Dupinga River at Barangay. Malinao, Gabaldon with a total population of roughly 50 families.

The Dupinga River as one of the foremost tourist destinations in the locality and as being awarded for the AgtaDumagats as their Ancestral Domain, contributes a lot on the economic aspect of the Indigenous People thus, when it is summer time and flow of tourists are at its peak, they definitely have an abundant supply of food on their table.

AgtaDumagats build their temporary houses and get their food from natural resources around them through hunting and gathering crops in the wild. After the sources around them are depleted, they move from one place to another to gather food. They move in the places where they can easily get their source of livelihood. The residences of AgtaDumagat in Dupinga River are from Brgy. Malinao and at the mountains, they move into the River because of their reasons that their livelihood are mostly found nearby wherein it is much stable for them to survive.

Natural calamities such as typhoon causing flood affect negatively in terms of their livelihood. All of their houses in the Dupinga River were washed out and damaged. AgtaDumagats, are not equipped with farming technologies such as multi-cropping and do not have a stable livelihood resources. The only method they knew about farming is the "Kaingin System" in which nowadays is being prohibited by our government. Aside from that, the AgtaDumagats are susceptible and rely on "Dole-Out System", in which the researchers believed that it would not help them to be being self – reliance.

One of the purposes of this research is to document the eating habits/lifestyle of AgtaDumagat in Gabaldon, Nueva Ecija in which can be a baseline for further research about their ways of living.

Moreover, as a faculty of College of Hotel and Restaurant Management and the Director of Extension Services Department of the university, with specialization on food ways of people, the scenario arose the interest of the researchers in coming up with the study of assessing the food culture of AgtaDumagats in Malinao, Gabaldon, Nueva Ecija, which for the future research, be a basis for appropriate extension program in which the Nueva Ecija University of Science and Technology can extend to the community; in doing so, the Local Government Unit and the academe can plan for an intervention program in addressing food insecurity of the indigenous people.

2. Statement of the Problem

The study generally aims to assess the eating lifestyle of AgtaDumagats. Specifically, the study aims to;

1. What are the socio-demographics of the respondents?
2. What are their different activities in acquiring foods?
3. What are the common food preferences acceptable by the AgtaDumagats?
4. What are their food preparation techniques?
5. What are their manners of eating?
6. What are the common practices and habits of AgtaDumagats?
7. What are their food cultural practices?
8. What are the significant relationship between the profile of the respondents and their means of obtaining foods and finances for purchasing food?

3. Materials and Methods

3.1 Research Locale

The Dupinga river of Gabaldon, Nueva Ecija, Philippines was awarded to the AgtaDumagats as their ancestral domain, in which this study took place. The stated ancestral domain is located at BaranggaysMalinao and Dupinga on the municipality of Gabaldon in the landlocked province of Nueva Ecija.

Gabaldon is geographically situated Southeast of the province of Nueva Ecija. Bounded on the Southeastern section of Dingalan, Aurora. On the Northwestern section by the Municipality of Laur, on the Northeastern part by the Municipality of Bongabon and on the Southwestern side by the Municipality of General Tinio. It is a valley located at the footstep of Sierra Madre Mountain in the east and Caraballomountain in the west.

3.2. Study Design

This is a community based ethnographic study aimed to determine the cultural practices of AgtaDumagats regarding their eating lifestyle the community is situated at BaranggayMalinao, Gabaldon, Nueva Ecija, Philippines. This study was conducted

October 2019 to May 2020. Questionnaire for this study was both written in English and Filipino language for clarification. During data gathering procedure, questions were translated into their native dialects. Gathering of data was divided into four parts. The first part was to secure permission from the National Commission of Indigenous People and from the tribe’s chieftain. The second part was a short letter requesting for the selected people to be the respondents of this study. The third part was consists of the profile of the respondents and the different attributes of the respondent’s ways/manner of eating. The last part of the instrument was questions for face to face interview.

3.3. Sampling Method

The indigenous community is composed of 110 households in which 80 respondents were randomly selected using purposive sampling technique to answer the structured questionnaire.

3.4. Validation Procedure

To ensure the reliability of the structured questionnaires, the researchers referred and consulted the expert in the field of indigenous culture. The questionnaire was validated by means of pilot testing and content validity.

3.5. Sample Size Calculation

The indigenous community’s population is very small, consists only of 110 households. The researchers decided that each household must have a representative in the conduct of this study. With a margin of error of 5% and a confidence level of 90%, the ideal sample size for this study was 80.

$$\text{Sample size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

3.6. Statistical Analysis

Statistical treatment of data was gathered by means of percentage and frequency distribution, weighted mean, ranking and chi square test.

Limitations

This study was only limited to one tribe of AgtaDumagats in the municipality, they were the indigenous community resides in BarangayMalinao. Other four (4) tribes known and recognized by the Local Government were not included in the conduct of this study.

4. Results and Discussions

1. Socio-Demographics of the AgtaDumagats

Table 1
Age

Age	Frequency	Percentage	Ranking
15-19	7	9%	5
20-24	17	21%	3
25-29	19	24%	2
30-34	14	17.5%	4

35 above	23	29%	1
Total	80	100%	

Table 1 shows the distribution of the respondents according to age. Based on the data presented, respondents ages 35 and above top the results having a total average of 29%, followed by the ages 25-29 which consists of 24%, while 21% of the total population belonged to the ages 20-24, and ages 30-34 consist the total average of 17.5%. And the least of the respondents were at the age bracket from 15-19 with a total average of 9%. According to Morelli (2017), With regards to age, elders not only play an integral part in preserving traditional knowledge, they are also pivotal in helping tackle broader community issues such as health, education, unemployment, racism, and oppression.

Table 2
Gender

Gender	Frequency	Percentage	Ranking
Male	40	50%	1.5
Female	40	50%	1.5
Total	80	100%	

Table 2 shows the gender of the respondents. It can be seen that 50% of the respondents were males and 50% were females. It reflects that both male and female AgtaDumagats were cooperative in social interactions.

In this regards, there is a very weak division of labor between the sexes. Women participate with their husbands in hunting on about half of the hunting trips (in Cagayan some women even secure game with bow and arrow themselves). Both sexes contribute equal amounts of time to work in their own gardens. Both sexes collect forest products for trade, and both work as casual laborers for farmers. Both men and women collect firewood for their own hearths, and both engage in house building, carrying water. Only women weave baskets and mats, and only women wash clothes. Only men spear fish in deep water on coral reefs, and only men climb high trees to collect wild honey, (www.encyclopedia.com, 2016).

Table 3
Religion

Religion	Frequency	Percentage	Ranking
Methodist	16	20%	2
Catholic	8	10%	4
Born Again	42	52.5%	1
Shamanism	0	0%	6
Iglesia Ni Cristo	1	1.25%	5
NONE	13	16%	3
Total	80	100%	

Table 3 presented that among the 80 respondents, 42 belonged to Born Again Christians which consist of 52.5%. Following were affiliated to Methodist who got 20%, while 16% of the respondents had no religion. 10% of the respondents were Roman Catholic, 1.25% attended Iglesia Ni Cristo and none of the respondents attended in Shamanism. With regards to their religion, the Dumagats are animists, practices and beliefs differ from person to person. Dumagat animism has less control over the people’s daily lives. In addition, they have adopted some of the beliefs of their Christian neighbors. Now, they hold to a universal belief in a single God, a result of Christian influence, (joshuproject.net, 2019).

Table 4
Civil Status

Status	Frequency	Percentage	Ranking
Married	59	74%	1
Single	19	24%	2
Widowed	2	2.5%	3
Total	80	100%	

Table 4 shows the civil status of the respondents. It can be seen that 2 or 2.5% were widowed, 19 or 24% were single, and 59 or 74% were married. Stutzer and Frey (2014), demonstrated that married persons have greater subjective well-being than persons who have never been married or had been divorced, separated or widowed.

Table 5
Dialect Spoken

Dialect	Frequency	Percentage	Ranking
Kabolowan	2	2.5%	4
Tagibulos	0	0%	5
Edimala	19	24%	2
Tagalog	55	69%	1
Ilocano	4	5%	3
Total	80	100%	

Table 5 shows the different dialect spoken of the respondents. It can be seen that 69% or 55 among respondents speak the Tagalog language. 19 or 24% were Edimala, 4 or 5% were Ilocano, and 2 or 2.5% were Kabolowan and none of the respondents speak Tagibulos as their dialect. According to Castro (2000), With regards to language, what is interesting is that Agta or Dumagats have lost their native languages and now speak the languages of neighboring non-Dumagat groups.

Table 6
Blood Quantum Degree

Blood Quantum Degree	Frequency	Percentage	Ranking
76-100	12	15%	4
51-75	14	17.5%	3
26-50	35	44%	1
1-25	19	24%	2
Total	80	100%	

Table 6 presented the degree of blood quantum of the respondents. Twenty six or 50% AgtaDumagat or the parents were half Dumagat and half Tagalog or others has the total number of (35). For 1-25% of dumagat blood quantum has the total number of (19). For 51-75% dumagat blood quantum has the total number of (14). And last for 76-100% dumagat blood quantum or pure dumagat has the total number of (12). It indicates that most of the respondents were half tagalog and half dumagat.

In this regards, according to Gutierrez, Lou, Lucenario, and Yebes, 2012. The dumagat-remontado identified as a Negritoethnilinguistic group. These indigenous peoples are said to be descendants of lowlanders who opted to live in the mountains to avoid subjugation by the Spaniards. Subsequently, they are intermarried with the Negrito groups. It is important to note here that the genetic admixture of the tribal population was due to intermarriage of the tribal members with low land Filipinos.

Table 7
Monthly Income

Monthly Income	Frequency	Percentage	Ranking
20,000 above	0	0%	4
10,000 - 19,999	0	0%	4
5,000 – 9,999	23	29%	3
1,000 – 4,999	25	31%	2
1,000 below	32	40%	1
Total	80	100%	

Table 7 shows the family monthly income of respondents. Most of the respondent’s ranges the family income of 1,000 and below which consist of 32 or 40% respondents. 25 or 31% of the respondent’s monthly income ranges from 1,000-4,999 and 23 or 29% of them ranges the family income of 5,000-9,999. None of the respondents has a monthly income ranges from 10,000-19,999 and 20,000 and above.

Although there are quite a number of indigenous tribes or ethnic groups in the country, they remain some of poorest, least privileged, and impeded members of society, (thegospelcoalition.org).

Table 8

Educational Attainment

Educational Attainment	Frequency	Percentage	Ranking
Elementary Level	54	67.5%	1
Elementary Graduate	15	19%	2
Secondary Level	11	14%	3
Secondary Graduate	0	0%	
College Level	0	0%	
College Graduate	0	0%	
Total	80	100%	

Table 8 shows the highest educational attainment of the respondents. It indicates that most of the respondents attained elementary level which has a total number of 54 or 67.5%, 15 or 19% of the respondents were elementary graduate, and the highest educational attainment of the respondents were secondary level, which consist of 11 or 14% and none of the respondents finished high school; more so, got college level/ units or degree. With regards to education, the AgtaDumagats belonged to the lowest literacy rates among the indigenous groups in the Philippines. It is a challenge to serve their needs in remotes areas, and standard education programs fail to take into account their cultures, languages, and current realities.(childhood explorer .org).

Table 9
Household Members

Family Members	Frequency	Percentage	Ranking
8-10	15	19%	2
4-7	52	65%	1
1-3	12	15%	3
Total	80	100%	

Table 9 shows the family members of the respondents. It indicates that most of the respondents (52 or 65%) has a family members ranges from 4-7, 15 or 19% of them has a family members ranges from 8-10 and 12 or 15% has a family members ranges from 1-3. With regards to the household members of AgtaDumagats, according to Balilla, (2013), the average size of an Aeta family is 5 family members, including the mother and the father because of lack of social services and high poverty.

Table 10
Activities in Acquiring Foods

Ways of Obtaining Foods	4 All the time	3 Frequently	2 Rarely	1 Never	Weighted Mean	Verbal Interpretation	Ranking
Traditional Farming	3	10	28	39	1.763	Rarely	4
Kaingin System	0	3	47	30	1.662	Never	5
Fishing	1	1	16	62	1.263	Never	7
Gold Panning	1	0	3	76	1.075	Never	8
Hunting	1	13	37	51	1.838	Rarely	3
Laborer	4	15	48	13	2.134	Rarely	2
Tourism Related Resources	17	18	33	12	2.5	Frequently	1
Barter (trading of products to food)	0	5	24	51	1.463	Never	6
Dole out system	0	1	75	4	1	Never	9

Table 10 shows the different activities in acquiring foods. Most of the AgtaDumagats answered “Frequently” in terms of tourism related resources; “rarely” in terms of being a laborer, go on hunting, fishing and traditional farming; and “Never” in terms of kaingin system, barter, fishing, gold panning, and relying on government. It indicates that most of the AgtaDumagats rely on tourism related resources as their activity in acquiring foods. Carr, Ruhanen and Whitford (2016), Ethnographic researchers were arguably the forerunners of studies focusing on the impacts of tourism on Indigenous peoples. Identified impacts of indigenous tourism included issues pertaining to acculturation, commodification of culture, and identifying ways to ensure tourists had the opportunity to have meaningful experiences of other cultures, in purer, simpler lifestyles.

Table 11
Food Preferences

Food Preferences	4 All the time	3 Frequentl y	2 Rarel y	1 Neve r	Weighte d Mean	Verbal Interpretati on	Rankin g
Meat Products							
Beef	0	0	17	63	1.213	Never	6
Pork	0	28	51	1	2.338	Rarely	2
Poultry	1	21	57	1	2.275	Rarely	3
Fish	4	41	33	2	2.588	Frequently	1
Goat	0	3	12	65	1.225	Never	5
Bash meat	1	14	57	8	2.1	Rarely	4
Others, specify							

Table 11 shows the meat food products preferences of AgtaDumagats. Based on the verbal interpretation, beef and goat were “Never” eaten at all because they don’t like the smell. “Rarely” eaten are pork, poultry, and bash meat. “Frequently” eaten was fish. It

indicates that most of the AgtaDumagats prefer fish in terms of meat products because it was less expensive.

Table 11.1

Plant Base Food

Plant Base Food	4 All the time	3 Frequently	2 Rarely	1 Never	Weighted Mean	Verbal Interpretation	Ranking
Vegetables	64	16	0	0	3.75	All the time	2
Fruits	2	23	55	0	2.363	Rarely	4
Rice	71	6	3	0	3.838	All the time	1
Root Crops	6	18	55	1	2.363	Rarely	4
Corn	1	5	70	4	2.038	Rarely	5
Wild Plant	4	31	42	3	2.438	Rarely	3
Others, specify							

This table presented the plant based food eaten by the respondents. “Rarely” eaten were wild plants, corn, fruits, and root crops. Eaten “All the time” were vegetables and the first on the rank was rice. It indicates that majority of the respondent’s preferred eating rice in terms of plant based food. With regards to food preferences, the basic staple was rice of which hundreds of varieties are cultivated. Main source of protein is fish which abound in oceans, lakes, rivers, streams, and ponds. Meat, especially pork and poultry is also commonly eaten. Beef is not readily available, and lamb is not too popular.

Table 12

Food Preparation

Food Preparation	4 All the time	3 Frequently	2 Rarely	1 Never	Weighted Mean	Verbal Interpretation	Ranking
Eating raw	0	0	14	66	1.175	Never	5
Cooking by Grilling or Boiling	25	27	28	0	2.963	Frequently	2
Cooking by Local Recipe and common cooking methods	45	20	15	0	3.375	All the time	1
Cooking by having rituals and other religious practices	0	2	15	63	1.238	Never	4
Cooking Hygienically	37	36	7	0	3.375	All the time	1

This table shows the food preparation techniques utilized by the respondents. Based on the verbal interpretation, they prepared “All the time” in terms of cooking (by local recipe and common cooking methods), and cooking hygienically. They “Frequently” prepared by grilling or boiling. They “Never” prepare food in terms of cooking international dishes, cooking (by having rituals and other religious practices), and eating raw. It indicates that most of the respondents prepared their foods hygienically and practiced cooking by local recipe and common cooking methods. With regards to food preparation, indigenous people have various ways like washing the foods to remove poisons and bitter taste. Native Americans devised a variety of cooking methods they used what resources they had available to come up with ways to boil, bake, and roast their foods. Some of those traditional cooking methods are still utilized by Native Americans, (indegenuousaustral.info, 2013) Most of the animal meat is cooked on open fires, while bark troughs are used to boil foodstuffs, (sbs.com.au, 2015).

Table 13
Manners of Eating

Manners of Eating	4 All the time	3 Frequently	2 Rarely	1 Never	Weighted Mean	Verbal Interpretation	Ranking
Do you pray?	10	13	51	6	2.338	Rarely	4
Do you use eating utensils?	14	8	38	20	2.2	Rarely	5
Do you wash your hands before eating?	73	5	2	0	3.888	All the time	2
Do you drink water before and after eating?	80	0	0	0	4	All the time	1
Do the smell of the food affect your appetite?	13	11	36	20	2.43	Rarely	3

Table 13 shows the manner of eating. Based on the verbal interpretation, they wash their hands before eating and drink water before and after eating “All the time”. The smell of the food affected their appetite “Rarely”. They also “Rarely” use utensils and pray before eating. According to Martin (2014), with regards to indigenous people’s manner of eating - before coming to the mat prior to each meal, men washed their hands and face twice, they dried themselves with soften cedar bark that acted as towel. Before they sat down they took a long drink from the drinking bucket

Table 14
Common Practices and Habits

Items	Yes		No		Total		Ranking
	F	%	F	%	F	%	
Do you go to sleep after eating?	22	27.5	58	72.5	80	100	6
Do you go to your neighbor after eating to have conversation?	35	44	45	56	80	100	4
Do you take “nga-nga” before eating?	33	41	47	59	80	100	5
Do you take “nga-nga” after eating?	68	85	12	15	80	100	2
Do you offer and share your foods to your neighbor?	78	97.5	2	2.5	80	100	1
Do you brush your teeth after eating?	64	80	16	20	80	100	3

This table shows the common practices and habits of AgtaDumagat. It can be seen that they offered and shared their foods to their neighbor, out of 80 respondents (78) answered “Yes” and (2) answered “No”. Sixty eight of them chewed and (12) don’t chewed “nga-nga” (bettle nut) after eating. Sixty four brushed their teeth and (16) don’t brush their teeth after eating. Thirty five of the respondents go to their neighbor after eating to have a conversation and (45) answered “No”. Thirty three of them chewed and (47) don’t chewed “nga-nga” (bettle nut) before eating. Fifty eight said “No” and (22) said “Yes” they sleep after eating.

With regards to the common practices and habits among the AgtaDumagats, Native Americans, in their relationship with food, set the example of living with the understanding that they are all related and responsible for one another, (mollylarkin.com, 2012). One thing that the Dumagats take that hasn’t change is their chewing of mama (bettle nut). In the Philippines, betel chewing is referred to as nga-nga. The Igorots chew the betel to slave off hunger and tiredness, used to help strengthen teeth because regular chewing believed to reduce cavities, (stuartxchange.com, 2014).

Table 15
What would they do if they do not have food to eat?

Items	Yes		No		Total		Ranking
	F	%	F	%	F	%	
Do you go fishing?	9	11	71	89	80	100	4
Do you go to forest to hunt and	52	65	28	35	80	100	3

get your foods?							
Do you ask for foods to your neighbor?	53	66	27	34	80	100	2
Do you go to store to buy foods?	77	96	3	4	80	100	1

Table 15 shows AgtaDumagats way of acquiring food if they do not have food to eat. Seventy seven answered “Yes”, they go to store to buy foods and 3 answered “No”. Fifty three, answered “Yes” on the item “asked for foods from their neighbors” and 27 answered “No”. Fifty two of them go to forest to hunt for foods while 28 of them don’t. Nine answered “Yes” and 71 answered “No” in fishing. According to Kuhnlein and Recerveur (1996), reported in limited studies done in Africa whereby lesser food items are being procured from traditional hunting gathering activities and more through trade.

Table 16
Cultural Practices

Cultural Practices
How do you prepare your traditional foods?
What is/are your hunting rituals?
What are your sustainable harvesting practices?
What are your best food preservation techniques?
What are your indigenous food products that Tagalogs are not eating/consuming?

The table presented the different cultural practices of AgtaDumagats in Barangay Malinao, Gabaldon, NuevaEcija. AgtaDumagats prepared their traditional foods just like how Tagalogs prepared their foods. According to Ms. Nora Santiago, Mr. Renato Casamis and Ms. AnnalynMallari; (*“Kapag may mgaokasyonkame pinag-iipunannamen at pinag-aambagan and pang handa, angiba ay kinukuhanamensabundok”*). If they will celebrate an occasion, beforehand they will save money for the upcoming celebration. If the savings was not enough to cover the expenses, their family/relatives will contribute money or give whatever they can give for the occasion. Women in the tribe who were good at cooking were called and the whole community will helped in the preparation. Men go to the forestland to get some plants and wild animals that is edible. For their hunting rituals, Mr. Ernesto Santiago, Mrs. Beatrice Sagurin and Mrs. Imelda Dela Torre said *“Nananalangin kame bagomangaso o bagopumuntasagubatparahumingingabay at humilingnamakahuli kame”*. As a native aborigines traditional rituals for hunting are still not lost. They do rituals before hunting or praying before hunting. Others are asking to God of nature for a safe hunting. According to Mr. Elvis Agurin, Mrs. Laila Santiago and Mr. Bulaw Santiago (*“Nagtitira kami ngkontingpananimmulasaaninamintuladngluyaparamaitanimulit at dinidilliganaraw-araw, hindi kami nagtatanimngmahirapbuhayin, yungmgamadalilangalagaan”*). For them to keep the good harvest; few among the AgtaDumagats used fertilizers, they just practiced organic farming. Some of them,

watering their plants were the only farming technique employed in their crops. Planting crops that are easy to care, produce and harvest were their priority to plant. They also placed fences for animals so as not to destroy the plants. They save on the purchase of seeds; when harvesting, they set-aside cutting's for re-planting. They do also rituals for the good harvest which were on their cultures long before. Mrs. Mercedes Santiago, Mr. Gabby Padua and Mrs. Mabel Mariano said (*“Kapag may nabilikaming sobrang pagkain namadalang masira, nilalagay naminsayelo, kung hindinaman ay niluluto agad naminitong may asintapossakan ang ulit namini luluwinkin abukasan, peromadalang namankasi kami bumilang sobra, kadalasan kung anolang yung kakain naminsamag hapon, nagtataparin kami ng mgakarne at isda.”*). For the Agta Dumagats food preservation techniques - Most of them said that once they had an excess food for weekly consumption they cooked it immediately or boiled it in a water with salt. They also put it in a container with ice. They also do sundried preservation technique for meat that is called “tapa” or fish called “daing”. Almost all of them only buys enough food for a day. There are indigenous food products or wild plants that Tagalogs are not consuming. Mr. Allan Agurin, Mr. Iton Avellanida and Mrs. Florida Obias said; (*“hindikinakin ng mgatagalogsukbaw, irabe, sikagi, moslob, tagupos, alakab dahil may kalayuan ang kuhanan ng mgayan, at kaming gakatutubolang halos ang nakakaalam paanokainin o lutuinyan”*).

With regards to their cultural practices, according to Valdeavilla (2018), with over 7,600 islands in the Philippines and three major island groups, it's no wonder that different cultural practices, traditions and groups are present in the country. Among the archipelago's existing communities, there are indigenous tribes who have managed to keep their cultural identity, despite the non-recognition and marginalization they're facing. They mostly reside in the mountains, and hence were not affected by Spanish or American colonization, which is the primary reason they were able to retain their customs and traditions

Table 17
Significant Association

	Age	Gender	Religion	Civil status	Dialect	Dumagat Blood Quantum Degree	Monthly Income	Highest educational attainment	Household member
Traditional farming	.620	.366	0.25	.244	.011	.761	.187	.069	.587
Kaingin system	.941	.021	.409	.341	.169	.843	.777	.135	.532
Fishing	.026	.055	.447	.246	.993	.997	.009	.332	.591
Gold panning	.167	.50	.095	.003	.992	.975	.03	.004	.504
Hunting	.103	0	.052	.71	.86	.545	.012	.559	.194
Laborer	.261	.142	.166	.038	.764	.214	.030	.380	.256
Tourism related resources	.375	.086	.036	.537	.207	.617	.375	.164	.602

Barter(trading of products to foods)	.004	.373	.024	.000	.067	.000	.606	.794	.000
Rely on government assistance	.794	.603	.937	.022	.877	.894	.025	.996	.738

Table 17 presented the significant association between the demographics (Age, Gender, Religion, Civil Status, Dialect Spoken, Dumagat Blood Quantum, Monthly Income, Highest Educational Attainment, and Household Members of the respondents) and their activities in acquiring foods. In this table, a numbers less than .05 as the level of significance marked yellow means significant. It indicates that the age of the respondents has a significant association with fishing and trading of products to foods; their gender with their ways of acquiring food (i.e. kaingin system and hunting). Their religion with tourism related resources and trading of products to foods. Their civil status with gold panning, laborer, trading of products to foods, and rely on government assistance; their dialect spoken with traditional farming, their blood quantum degree with trading of products to foods. Their monthly income with fishing, gold panning, hunting, laborer, and rely on government assistance; their educational attainment with gold panning, and their household members with trading of products to foods. “Civil Status” top most the rank among other items, got significant value of 0.38 and showed that the more that AgtaDumagats were married the more responsibilities they had, specially the ways or activities on how to acquire foods for their daily consumption.

Based on the study conducted by Balilla, McHenry, Parkinson, Banal (2013), The Indigenous Aeta maintain a primarily nomadic hunter-gatherer lifestyle in their forested ancestral lands. Through the continued encroachment of non-Indigenous populations, the Aeta persist at a critical level. Finding it increasingly difficult to sustain their traditional livelihoods, they must engage in informal commerce to procure sufficient food throughout the year. This work explores the basis of self-identity, traditional kinship ties, evolution of sociopolitical organization, and the developing political options that sustain the small and vulnerable Indigenous population. Despite recent tentative sociopolitical developments, securing cultural protection requires greater effort in developing political communication and representation at a local and national level. In doing so, the Aeta can meet their basic needs, secure traditional cultural knowledge, and are able to influence their own development during a time of relatively rapid acculturation within the mainstream Philippine societal complex.

Recommendations

1. The government or non-government organizations may conduct a summer class for children of AgtaDumagats for them to be prepared academically, physically and emotionally for the incoming school year. The researchers may also recommend that the Academe and LGU must document their native language because results of the study shows that native language will be lost eventually on the generations to come.
2. The researchers recommend that the government may involve the AgtaDumagats on different seminars that is related to farming. Recommended

also for the female AgtaDumagats be allowed to undergo livelihood training programs to provide additional income for their family.

3. AgtaDumagats preferred fish and rice as their basic staple, the researchers recommend that NGO's (Non-Government Organization) may conduct different programs like livelihood programs that will help AgtaDumagats to enhance their ability in preserving foods and in cultivating rice.

4. AgtaDumagats often use a piece of bark from trees to clean their teeth after eating. The researchers recommend that government may conduct a dental mission at least once a month for them to be aware on proper dental care and hygiene.

5. The researchers recommend that the government or NGO's (Non-Government Organization) may give them seedlings of different vegetables and educate them how to grow their food, as well as teaching them proper farming management in order to keep a good harvest.

6. The government may set an event especially for them at least once a year to celebrate "Katutubo day" (Indigenous People Day) for them to feel that their presence in the municipality is well appreciated and they play a special role in the community.

7. The researchers also recommend that the government may at least provide the AgtaDumagats with housing provisions for those families who just live on a small tent.

References

- (1) Asogwa IS. Author of promotion of Indigenous food preservation and processing knowledge and challenge of food security in Africa
- (2) Barrington K. (2019): Traditional Native American Cooking; Foods and Techniques.
- (3) Camacho L. (2015): Indigenous Knowledge and Practices for The Sustainable Management of Ifugao Forests in Cordillera, Philippines.
- (4) Cecilia Santos-Acuin, A. Troy Gepte IV and M. Justinian Dedace (2015). The Aetas Ways of Life.
- (5) Clad J. (1998): Conversation and Indigenous Peoples.
- (6) Gavilan J. (2015): Indigenous Vegetables and the Filipino Diet.
- (7) Graham M. (2014): Cultural Traditions of Native American Hunting and Gathering.
- (8) Grise, C. (2013): Dining Manners Around the World.
- (9) Kuhnlein (2009): FAO Supported Study on Indigenous Food Systems, Nutrition, and Health

- (10) Larkin M. (2012): A Native American Teaching on the Gift of God.
- (11) Martin (2014): Native Americans in Olden Times for Kids.
- (12) Oxendine, J. (2014), author of Native American Home Etiquette.
- (13) Santos K. (2011): Beyond Organic, lifestyle.inquirer.net
- (14) Tanalgo K. (2015): Wildlife Hunting, Use, and Beliefs of Indigenous People in Mt. Apo National park, Mindanao Island Philippines.
- (15) Manners of Eating Among Indigenous People, 2012
<https://www.mollylarkin.com/a-native-american-teaching-on-the-gift-of-God> Date retrieved: 2/23/19 Time retrieved: 9:14pm
- (16) Indigenous People's Beliefs and Traditions of Food Eating Habits, 2013
<https://indigenoustralia.info/food-rules-a-laws.html> Date retrieved: 2/20/19 Time retrieved: 10:02pm
- (17) Indigenous People's Beliefs and Traditions of Food Eating Habits, 2012
<https://www.mollylarkin.com/a-native-american-teaching-on-the-gift-of-God> Date retrieved: 2/23/19 Time retrieved: 9:14pm
- (18) Food Preparation, 2013 <https://indigenoustralia.info/food-rules-a-laws.html> Date retrieved: 2/20/19 Time retrieved: 10:02pm
- (19) Food Preparation, 2015 <https://www.sbs.com.au/food/article/2008/07/01/about-native-australian-food> Date retrieved: 2/23/19 Time retrieved: 9:28pm
- (20) Food Preparation, 2013 <https://www.brighthubeducation.com/social-studies-help/96105-traditional-native-american-cooking> Date retrieved: 2/19/19 Time retrieved: 9:32pm
- (21) Food Preparation, 2014 <https://www.com/Lifestyle-social-and-economic-status-of-indigenous-people,pdf,2014> Date retrieved: 2/22/19 Time retrieved: 11:50pm
- (22) Cultural Practices, 2013 <http://www.fao.org/fsnforum> Date retrieved: 2/20/19 Time retrieved: 5:51 pm
- (23) Cultural Practices, 2019 <https://www.lec.on.ca/resources/cooking-techniques/modern-and-traditional-methods-of-home-preservation> Date retrieved: 2/23/19 Time retrieved: 7:26 pm
- (24) Cultural Practices, 2011 <https://publications.newberry.org/indigenousof>

- midwest/indian-imagery/how-we-know Date retrieved: 2-2-19 Time retrieved: 11:10 pm
- (25) Cultural Practices, 2014 <https://www.com/Lifestyle-social-and-economic-status-of-indigenous-people.pdf> Date retrieved: 2/22/19 Time retrieved: 11:50 pm
- (26) Cultural Practices, 2011 <https://publications.newberry.org/indiansofthemidwest/indian-imagery/how-we-know> Date retrieved: 2/22/19 Time retrieved: 10:50am
- (27) Cultural Practices, 2013 <https://ethnobiomed.biomedcentral.com/articles/10.1186/s13002-015-005-y> Date retrieved: 2/22/19 Time retrieved: 11:14pm
- (28) Food Ways Of Indigenous People in the Philippines, 2009 www.nzdl.org>gsdlmod, 2009 Date retrieved: 2/25/19 Time retrieved: 9:54am
- (29) Food Ways Of Indigenous People in the Philippines, 2016 <https://www.slideshare.net/mobile/bardotgov/selected-indigenous-people-plants-from-southern-tagalog-region-of-the-philippines> Date retrieved: 2/24/19 Time retrieved: 10:06pm
- (30) Food Ways Of Indigenous People in the Philippines, 2011 <https://www.FinalReportofDumagatAurora.pdf> Date retrieved: 2/25/19 Time retrieved: 9:49am
- (31) Food Ways Of Indigenous People in the Philippines, 2014 www.sturtxchange.com/NgaNga Date retrieved: 2/23/19 Time retrieved: 9:33pm
- (32.) Food Ways Of Indigenous People in the Philippines, 2013 <https://www.jacobimages.com/2013/05/igorots-cordilleras> Date retrieved: 2/26/19 Time retrieved: 6:57pm