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Mount Arayat Protected Landscape Protection: Knowledge, Perception and Practices of the Youth

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ABSTRACT

The study aimed to assess the knowledge, perception, and practices of youth of San Agustin Magalang Pampanga towards the conservation and protection of Mt. Arayat Protected Landscape where the target respondents in the study are 265 youth of San Agustin, Magalang, Pampanga. Survey questionnaires were used to gather the data and the information. In summary, it is noticeable that the youth respondents have a high level of knowledge about MAPL as a protected area and the thereafter protocols, activities, and rules with a general weighted mean of 3.32 which implies High awareness and expertise. It also indicated that Youth respondents do highly agree that proper management and protection, cigarettes caused by forest fires, people participation, and youth involvement are beneficial to Mt Arayat Protected Landscapes with an overall mean of 3.41. It is also noticeable that good practices were being implied in the results from the youth respondents. From avoiding littering, paying entrance fees, complying with the Do's and Don'ts's of any Protected landscapes. This implies the correlation with the high knowledge of the respondents on the Mt Arayat Protected landscape.

Keywords: Youth, Knowledge, Perception, Practices, Mt. Arayat and Survey

• **Received:** 02.07.2024

• **Received in revised form:** 06.07.2024

• **Accepted:** 08.07.2024

To cite this article: Tayag, M.C.C.; Aquino. A.J.T. Mount arayat protected landscape protection: knowledge, perception and practices of the youth. *J. Agric. For. Res.*, 2024, 3(3), 7-13.

INTRODUCTION

The enchanting Mt Arayat is located in the Pampanga towns of Arayat and Magalang, and is one of the simplest parks to reach from Manila. The Pampanga River passes through the provinces of Bulacan, Pampanga, and Nueva Ecija and has a circular

volcano crater at its crest. Mt. Arayat, famed for its crystal-clear waterfalls and quiet surrounding, was designated as a Forest Reserve in 1921 before being designated a National Park in 1933. Mt. Arayat is home to endemic and endangered flora and wildlife, as well as geological rock formations with tourist potential. It is also an important supply of water for

domestic and agricultural usage (Eco - exploration, 2022).

The abundance of species on Mt. Arayat, according to the Department of Environment and Natural Resources, is the fundamental reason for its designation as a protected area. Other considerations include Mt. Arayat's irreplaceability or the presence of species with restored ranges and congregations, its vulnerability or the presence of endemic and globally threatened species, its naturalness or the presence of intact natural cover Forest cover, abundance and diversity of flora and fauna, and the uniqueness or outstanding cultural and geological features (Mayuga, 2021).

Young people, on the other hand, can actively contribute to the preservation and enhancement of the environment. They have the power to change their way of life and the impact it has on the environment. They may make their homes, schools, and youth organizations more environmentally friendly by implementing eco-friendly practices, recycling various goods, and conserving resources such as water and electricity. Engaging young people in environmental preservation significantly affects their attitudes and behaviors, as well as their families and even their parents (Acharya, 2013).

According to Simpao et al., (2020), the importance of exploiting natural resources as a driver of development is recognized by experts and practitioners in various areas. Young people who are empowered and ecologically concerned may be the most powerful change agents. For the long-term safety and management of the environment. Pellier et al. (2014) also stated that they routinely practice acting to address environmental challenges, and that practice may necessitate a high level of dedication.

Therefore, this study aims to provide knowledge, perception and to determine regarding their practices on the protection of Mt. Arayat Protected Landscape.

MATERIALS AND METHODS

The study was conducted in Brgy San Agustin Magalang Pampanga. The study used standardized survey questionnaires. Descriptive analysis was used in this study to determine the respondent's knowledge, perception, and practices on the protection of Mt. Arayat Protected Landscape.

A total of 851 (Philippine Statistics Authority, 2019) households are located in San Agustin, Magalang Pampanga separated by four purok. Through the Slovincs Formulation Population Sampling, 265 households were randomly surveyed divided proportionally within the four purok. Within each household, only 15 to 30 years old respondents were selected in this study, as stated by the WHO as "Youth".

The elicited quantitative data had undergone checking, scoring, analysis, and interpretation.

RESULTS AND DISCUSSION

Socio-Economic Profile

The highest number of respondents is the age ranging to 15-19 years old with 52.07% out of the total respondents, followed by ages 20-24 with 44.15% and 3.77% from ages 25 to 30. Half of the respondents are High School graduates accumulating to 54% and 32.07% currently and undergraduate collegiate students.

Knowledge of San Agustin's Youth on the Protection of Mt Arayat Protected Landscape (MAPL)

a. Mt. Arayat is a Protected Area

Respondents are asked if they are aware if Mt Arayat is a protected area. As a result, the respondents are highly aware with a general mean of 3.41.

b. MAPL is home of numerous Wildlife species

The respondents are highly aware that Mt. Arayat Protected landscape is a home of numerous wild animals and other species with a mean of 3.26.

c. MAPL is rich in Natural resources

As shown in table 1 with a mean average of 3.42, are highly knowledgeable that Mt. Arayat Protected landscape is rich in resources such as clean water and food.

d. MAPL is an Ecotourism Site

With a mean of 3.19, the response is interpreted as under "aware" that MAPL is an Ecotourism site.

e. MAPL is a Beautiful Natural feature of Pampanga

It is also visible that the respondents are highly aware that the Mt. Arayat Protected landscape is one of the most beautiful natural features in the Province of Pampanga, as listed in the table with an average of 3.50.

Table 1: Knowledge of Youth on Protection of Mt Arayat

QUESTIONS		HIGHLY AWARE	AWARE	NOT AWARE	HIGHLY NOT AWARE	Total	MEAN
a. Mt. Arayat is a Protected Area	FREQUENCY	125	124	16	0	265	3.41
	PERCENTAGE	47.17	46.79	6.04	0.00		
b. MAPL is home of Wildlife	FREQUENCY	100	135	30	0	265	3.26
	PERCENTAGE	37.74	50.94	11.32	0.00		
c. MAPL is reach in Natural resources	FREQUENCY	126	125	14	0	265	3.42
	PERCENTAGE	47.55	47.17	5.28	0.00		
d. MAPL is a Ecotourism Site	FREQUENCY	100	122	36	7	265	3.19
	PERCENTAGE	37.74	46.04	13.58	2.64		
e. MAPL is a Beautiful Natural feature of Pampanga	FREQUENCY	150	101	10	4	265	3.50
	PERCENTAGE	56.60	38.11	3.77	1.51		
f. Increasing Visitors of MAPL helps Families in their Living	FREQUENCY	95	125	44	1	265	3.18
	PERCENTAGE	35.85	47.17	16.60	0.38		
g. Mt Arayat is a prohibited dump all waste	FREQUENCY	140	100	22	3	265	3.42
	PERCENTAGE	52.83	37.74	8.30	1.13		
h. Landslides in Mt. Arayat occurs as a result of Forest Degradation	FREQUENCY	102	115	45	3	265	3.19
	PERCENTAGE	38.49	43.40	16.98	1.13		
i. Cutting of Trees is prohibited inside MAPL	FREQUENCY	132	100	30	3	265	3.36
	PERCENTAGE	49.81	37.74	11.32	1.13		
j. Collecting and hunting Plants and Animals is Prohibited in MAPL	FREQUENCY	108	117	35	5	265	3.24
	PERCENTAGE	40.75	44.15	13.21	1.89		

GENERAL MEAN: 3.32

Legend: 1-1.75 = Highly not aware, 1.76-2.5 = Not Aware, 2.26-3.25 = Aware and 3.26-4.00 Highly Aware

f. Increasing Visitors of MAPL helps Families in their Living

All in all, the respondents are aware that the increasing number of visitors to Mt. Arayat Protected landscape can also help the local families who live there make a living with a mean of 3.18 which is under “aware”.

g. Mt Arayat is a prohibited dump all waste

In general, 3.42 is the mean weighted average of the respondents who are highly aware that Mt. Arayat is prohibited from dumping all types of waste.

h. Landslides in Mt. Arayat occurs as a result of Forest Degradation

This table also shows that most of the respondents are aware with a mean average of 3.19 that Landslides in MAPL occur as a result of forest degradation and the cutting of trees.

i. Cutting of Trees is prohibited inside MAPL

Results also show with a mean of 3.36, responses are categorized under “highly aware” that Cutting trees is prohibited inside MAPL

j. Collecting and hunting Plants and Animals is Prohibited in MAPL

Also, the respondents are aware that the collection and hunting of plants and animals are also prohibited in Mt.Arayat Protected Landscape with a weighted mean of 3.24.

In summary, it is noticeable that the youth respondents have a high level of knowledge about MAPL as a protected area and the subsequent protocols, activities, and rules with a general weighted mean of 3.32 which implies High awareness and knowledge.

Perceptions of San Agustin’s Youth on the Protection of Mt Arayat Protected Landscape (MAPL)

a. MAPL needs to be protected because of its richness and multiple benefits

The respondents are asked if Mt. Arayat needs to be protected; most of the respondents highly agree that Mt. Arayat needs to be protected not only because of the richness of its diverse species but also the

number of benefits that the people gain from it, with a mean of 3.62.

b. The Ecotourism function of MAPL is one reason to preserve and conserve

The Table 2 also shows that the respondents do highly agree that the Ecotourism function of Mt. Arayat Protected Landscape is also one of the reasons why Mt. Arayat needs to be preserved and conserved as the general weighted average of 3.29.

Table 2: Perceptions of Youth on Protection of Mt Arayat

QUESTIONS		HIGHLY AGREE (4)	AGREE (3)	NOT AGREE (2)	HIGHLY NOT AGREE (1)	Total	MEAN
a. MAPL needs to be Protected because of its richness and multiple benefits	FREQUENCY	171	89	4	1	265	3.62
	PERCENTAGE	64.53	33.58	1.51	0.38		
b. The Ecotourism function of MAPL is one reason to preserve and conserve	FREQUENCY	102	142	18	3	265	3.29
	PERCENTAGE	38.49	53.58	6.79	1.13		
c. Negligence might one of the main causes of Damages tin MAPL	FREQUENCY	121	103	38	3	265	3.29
	PERCENTAGE	45.66	38.87	14.34	1.13		
d. Proper managing of forest improve tourism, wind barriers and prevent landslides	FREQUENCY	148	104	11	2	265	3.50
	PERCENTAGE	55.85	39.25	4.15	0.75		
e. one of the causes of Forest Fires is the cigarette lift lit in MAPL	FREQUENCY	91	122	35	17	265	3.08
	PERCENTAGE	34.34	46.04	13.21	6.42		
f. Protecting MAPL is beneficial to next generations	FREQUENCY	164	93	6	2	265	3.58
	PERCENTAGE	61.89	35.09	2.26	0.75		
g. restoring and enhancing MAPL increase Visits from local and foreign and thereby improve livelihood of local communities	FREQUENCY	141	112	10	2	265	3.48
	PERCENTAGE	53.21	42.26	3.77	0.75		
h. People participation aroung MAPL is an important aspect of MAPL Protection	FREQUENCY	127	125	12	1	265	3.43
	PERCENTAGE	47.92	47.17	4.53	0.38		
i. Youth can help in conserving and protecting MAPL	FREQUENCY	124	124	14	3	265	3.39
	PERCENTAGE	46.79	46.79	5.28	1.13		
GENERAL MEAN: 3.41							

Legend: 1-1.75 = Highly not aware, 1.76-2.5 = Not Aware, 2.26-3.25 = Aware and 3.26-4.00 Highly Aware

c. Negligence might be one of the main causes of damage in MAPL

The respondents are asked if negligence is the main cause of damage to MAPL with an average of 3.29, as a result, the respondents are highly agreeing.

d. Proper management of forests improves tourism, and wind barriers and prevents landslide

Overall, the respondents do highly agree that proper management of forest can improve tourism, serve also as a wind barrier, and prevent landslides with a mean of 3.50.

e. One of the causes of forest fires is the cigarette littering

As a result, the respondents agree that one of the causes of forest fires is cigarette littering in MAPL with a mean of 3.08.

f. Protecting MAPL is beneficial to next-generation

In general, the respondents strongly agree that protecting Mt. Arayat Protected Landscape is beneficial to the next generation and so on with a mean of 3.58.

g. Restoring and enhancing MAPL increases visits from local and foreign and thereby improves the livelihood of local communities.

Mostly, the respondents do highly agree that restoring and enhancing Mt. Arayat can help to increase the visitation from both local and foreign

visitors, and therefore can help improve the livelihood of the local community in the area with a mean of 3.48.

h. People participation around MAPL is an important aspect of MAPL Protection

As a result, the respondents do highly agree that people's participation around MAPL is an important aspect of the protection of Mt Arayat with a weighted mean of 3.43.

i. Youth can help in conserving and protecting MAPL

Practices of San Agustin’s Youth on the Protection of Mt Arayat Protected Landscape

Table 3: Practices of Youth on the Protection of Mt. Arayat

QUESTIONS		ALWAYS (4)	SELDOM (3)	RARELY (2)	NEVER (1)	Total	MEAN
a. Avoid littering within MAPL	FREQUENCY	200	40	25	0	265	3.66
	PERCENTAGE	75.47	15.09	9.43	0.00		
b. Pay appropriate entrance fee	FREQUENCY	156	60	26	23	265	3.32
	PERCENTAGE	58.87	22.64	9.81	8.68		
c. Helps collect garbage within MAPL	FREQUENCY	103	111	30	21	265	3.12
	PERCENTAGE	38.87	41.89	11.32	7.92		
d. Collects fruits and wild plants.	FREQUENCY	21	56	58	130	265	1.88
	PERCENTAGE	7.92	21.13	21.89	49.06		
e. Hunts wild animals ex. Monkeys, alligators	FREQUENCY	14	14	22	215	265	1.35
	PERCENTAGE	5.28	5.28	8.30	81.13		
f. Participate in tree planting activities.	FREQUENCY	60	90	70	45	265	2.62
	PERCENTAGE	22.64	33.96	26.42	16.98		
g. Do kaingin or charcoal making.	FREQUENCY	20	35	25	185	265	1.58
	PERCENTAGE	7.55	13.21	9.43	69.81		
h. Cut trees.	FREQUENCY	6	24	20	215	265	1.32
	PERCENTAGE	2.26	9.06	7.55	81.13		
i. Help disseminate information about the importance of MAPL.	FREQUENCY	105	83	54	23	265	3.02
	PERCENTAGE	39.62	31.32	20.38	8.68		
j. Aid in reporting violators and violations of laws within MAPL.	FREQUENCY	90	66	62	47	265	2.75
	PERCENTAGE	33.96	24.91	23.40	17.74		
GENERAL MEAN: 2.46							

Legend: 1-1.75 = Never, 1.76-2.5 = Rarely, 2.26-3.25 = Seldom and 3.26-4.00 always

(MAPL)

a. Avoid littering within MAPL

As shown in table 3, there are 75.47% of the respondents always avoid littering within MAPL with a general mean of 3.66

b. Pay appropriate entrance fee

Lastly, the respondents highly agree that the youth can help in conserving and protecting MAPL with a mean of 3.39.

In General Perception, the results of the study imply that Youth respondents do highly agree that proper management and protection, cigarettes caused forest fires, people participation, and youth involvement are beneficial to Mt Arayat Protected Landscapes with an overall mean of 3.41.

With a weighted mean of 3.32, respondents shows that they always pay appropriate entrance fees to all borders of the MAPL.

c. Helps collect garbage in MAPL

Table 3 also shows seldom of the respondents participated in the garbage collection of MAPL with a weighted mean of 3.12.

d. Collects fruits and wild plants

With the highest responses, never did the respondents collected fruits and wild plants in MAPL with a weighted mean of 1.88.

e. Hunts wild animals

The results in the table 3 also show that 81.13% of the respondents never hunted any wild animals in the MAPL with a weighted mean of 1.35.

f. Participate in the tree planting activities

With a weighted mean of 2.62, Youth respondent’s seldomly participated in ant tree planting activities of MAPL.

g. Do kaingin or charcoal making

The results also shown in table 3 that 69.81% of the respondents never do Kaingin or charcoal making. Gaining a general weighted mean of 1.58.

h. Cut trees

It also implies positively that 81.13% of the respondents never had cut trees in MAPL

i. Helps disseminate information about MAPL

This study also resulted to knowing that Youth respondents helps in dissemination of information on the importance of MAPL with 3.02 weighted mean.

j. Aid in reporting violators

Table 3 also shown significant result that 90 of the respondents are do always aid in reporting violators and violators of the laws within MAPL.

In summary, it is noticeable that good practices were being implied in the results from the youth respondents. From avoiding littering, paying entrance fees, complying with the Do’s and Don’ts’s of any protected landscapes. This implies the correlation with the high knowledge of the respondents on the Mt Arayat Protected landscape.

Willingness to pay for the protection of Forests

Results revealed that 92.08% of the youth respondents are willing to donate and pay for the protection of the forests

Table 4: Willingness to donate

willingness to donate/pay	Frequency	Percentage
YES	244	92.08
NO	21	7.92
TOTAL	265	100

The record also shows that 73.36% of the who said YES is willing to donate the amount ranging of 1 peso to 100 pesos.

Table 5: Amount to be donated

Pesos	Frequency	Percentage
1-100	179	73.36
101-500	45	18.44
501-1000	16	6.56
1001-3000	1	0.41
3001-5000	0	0
5000 and above	3	1.23
total	244	100

Respondents were also asked to which entity they will entrust their donations, surprisingly, they had chosen the Local Government Unit with almost half of the respondents (47.13%).

Table 6: Entity to entrust their donations

AUTHORITY	frequency	Percentage
DENR	92	37.7
PNP	14	5.74
LGU	115	47.13
NGO	23	9.43
TOTAL	244	100

Implications

In summary, it is noticeable that the youth respondents have a high level of knowledge about MAPL as a protected area and the subsequent protocols, activities, and rules with a general weighted mean of 3.32 which implies high awareness and knowledge. It also indicates that Youth respondents do highly agree that proper management and protection, cigarettes caused by forest fires, people participation, and youth involvement are beneficial to Mt Arayat Protected Landscapes with an overall mean of 3.41. It is also noticeable that good practices were being implied in the results from the youth respondents. From

avoiding littering, paying entrance fees, and complying with the Do's and Don'ts of any protected landscapes. This implies the correlation with the high knowledge of the respondents on the Mt Arayat Protected landscape.

RECOMMENDATIONS

Since high knowledge prevailed in the study, it is highly recommended that Natural resources campaigns and movement be designated to Youth by the Local Government Unit, as the youth's Knowledge, Perceptions, and Practices are commendable. Future efforts must focus on inspiring young people to become involved in community life and to develop an interest in the forestry industry.

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