BIBLIOGRAPHY

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ABSTRACT

The study is on the assessment of the solid waste disposal practices at barangay Betag, La Trinidad, Benguet. The study was conducted to satisfy the following: to determine the socio-demographic profile of the respondents, the types of solid waste materials that the respondents dispose, the solid waste disposal practices/methods of the respondents, and the problems encountered by the respondents on solid waste disposal practices.

Interview schedule with survey questionnaire were used to gather the data and information imperative to the study on the assessment of solid waste disposal practices from 50 individuals who were randomly selected as respondents of the study.

Finding indicates that majority of the respondents are females. The highest age group ranged from 15 to 20 and the lowest age group ranged from 61 to 70. Majority were married and were Roman Catholics; and engaged in housekeeping.

The types of solid waste that the respondents disposed: for non-biodegradable wastes they disposed; plastics, cans, bottles/glass diapers and sanitary napkins whereas for

the biodegradable wastes, the respondents disposed vegetable peelings, fruit peelings, papers, kitchen left overs and boxes.

With regards to the methods of disposing non-biodegradable and biodegradable waste materials by the respondents were through recycling, garbage collection, backyard pit and composting.

The problems met by the respondents on solid waste disposal were: lacked of discipline/cooperation, lacked of area for composting and poor method of collecting garbage.

RESULTS AND DISCUSSION

The study is on the assessment of the solid waste disposal practices at Barangay Betag, La Trinidad, Benguet. This has been undertaken purposely to determine the socio-demographic profile of the respondents, the types of solid waste materials that the respondents disposed every day, the methods/practices in disposing the solid waste materials, and the problems they encountered and its possible solution. The following are the results of the study with its analysis.

Socio-Demographic Profile of the Respondents

Table 1 presents the socio-demographic profile of the respondents. It includes the age, sex, civil status, educational attainment, religion, and occupation of the respondents.

Age. Among the 50 respondents, 36 % of the respondents belonged to the age ranged from 21 to 30 years old; 28%, from 31 to 40; 18 % from 15 to 20 years old; and only (4 %) belonged to the age ranged from 51 to 60 and from 61 to 70 years old. The result shows that majority of the respondents were relatively young and are more concerned to their environment and generally engaged in environmental behavior.

Sex. As seen in the table, majority of the respondents were females (54%) and only 46% were males. This indicates that the women-respondents are more responsive to social problems like the harmful effects of wastes if they are not disposed and managed properly.

Civil Status. Majority of the respondents were married (62%), 38% were still single as shown in Table 1. This indicates that there is slight difference in the number of married and single exposed to hazardous wastes. Accordingly, the respondents managed and disposed properly their wastes.

Educational Attainment. Regarding to their educational attainment, Table 1 showed that there were 36% finished college level; 32% reached high school level; and 24% attended elementary level. The result shows that all the respondents are literate, hence, are receptive to innovations being introduced to them particularly on waste management.

Religion. Majority of the respondents were Roman Catholics (26%) while 2% of them were Baptist and Iglesia ni Cristo. This indicates that all religion in the study area had participation on the solution of garbage disposal problem.

Occupation. With their occupation, most of the respondents were housekeepers 24%; 20% of them were laborer; farmers, 16%; 12% of them were storekeepers; 10% were drivers; 8% were teachers; and 4% were police and nurse while 2% of the respondents were optometrist. This implies that all the respondents knew the negative practices in managing their wastes.

Table 1. Profile of the Respondents

PARTICULAR	FREQUENCY	PERCENTAGE (%)
Age		
15-20	9	18
21-30	18	36
31-40	14	28
41-50	5	10
51-60	2	4
61-70	2	4
TOTAL	50	100

Table 1. *Continued…*

PARTICULAR	FREQUENCY	PERCENTAGE (%)
Sex		
Female	27	54
Male	23	46
TOTAL	50	100
Civil Status		
Married	31	62
Single	19	38
TOTAL	50	100
Educational Attainment		
College	18	36
High School	16	32
Elementary	12	24
Vocational	4	8
TOTAL	50	100
Religion		
Roman Catholic	26	52
Anglican	16	32
Free Believers	6	12
Baptist	1	2
Iglesia Ni Cristo	1	2
TOTAL	50	100
Occupation		
Housekeeper	12	24
Laborer	10	20
Farmer	8	16
Storekeeper	6	12
Driver	5	10
Teacher	4	8
Police	2	4
Nurse	2	4
Optometrist	1	2
TOTAL	50	100

Types of Solid Waste Materials

Table 2 shows the types of waste materials that the respondents disposed before the next collection or segregation of wastes. For the non-biodegradable waste, most of the respondents (96%) disposed plastics; 58%, cans; 46%, bottles/glass; and only 20%, disposed diapers and sanitary napkins.

For the biodegradable waste materials that the respondents disposed the following: 88%, vegetable peelings; 68%, fruit peelings; 62%, papers; 58%, kitchen left overs and 34%, boxes.

Finding indicates that the major waste materials disposed by the respondents for the non-biodegradable materials were plastics, cans, and bottles/glass while for the biodegradable waste materials were the vegetable peelings and fruit peelings before the collection and segregation of their wastes.

This corroborated by the findings of Betenio that in Bontoc, non-biodegradable waste are the most common generate by hospitals. Piluden (2000) on the other hand, reported that in dominantly agricultural areas, most waste are biodegradable and are made of agricultural wastes such as animal manure, crop residues, grasses or weeds and that even at home. Mostly of the waste generated are vegetable trimmings and fruit peelings which are mostly composted.

Table 2. The types of solid waste materials disposed by the respondents.

TYPES	FREQUENCY	PERCENTAGE (%)
Non-biodegradable		
Plastics	48	96
Cans	29	58
Bottles/glass	23	46
Diapers/Sanitary Napkins	10	20
Biodegradable		
Vegetable peelings	44	88
Fruit peelings	34	68
Papers	31	62
Kitchen left overs	29	58
Cartons /boxes	17	34

*Multiple responses

Methods/Practices of Disposing Waste Materials

The methods employed by the respondents in waste disposal are presented in Table 3. Result showed that the respondents disposed through recycling of which they considered as the most practical method of disposing non-biodegradable wastes as claimed by 80%; followed by garbage collection with 40%; 16%, do backyard pit; segregated and sold to garbage scrappers with 14%, and burning and dumping on a certain area, 8%.

It is also presented in Table 2 that composting was the common means of disposing biodegradable wastes with a percentage of 60%.

This means that most of the residents of Betag, La Trinidad, Benguet do recycling in disposing non-biodegradable waste materials since non-biodegradable wastes such as bottles, plastics, and cans are often sold to junkshops or sold to garbage scrappers.

It was noted that most of the respondents (60%) do composting method of disposing their biodegradable waste materials.

Table 3. The practices of the respondents on solid waste management.

METHOD	FREQUENCY	PERCENTAGE (%)
Non-biodegradable		
Recycling	40	80
Garbage collection	20	40
Backyard pit	8	16
Segregated and sold to garbage scrappers	7	14
Burning	4	8
Dumping on a certain area	4	8
Biodegradable		
Composting	30	60
Garbage collection	22	44
Backyard pit	10	20
Dumping on a certain area	5	10
Burning	4	8

*Multiple responses

Problems Associated with Waste Disposal

Table 4 shows the problems encountered by the respondents regarding waste disposal. Majority of the respondents (72%) claimed that they lacked of discipline/cooperation; 42% said that they lacked area for composting; 20%, the irregularity of collection/poor method of collecting garbage because sometimes the garbage collectors don't get the garbage on time; 14%, had inadequate knowledge of recycling waste; 12%, poor dissemination of ordinance while 10% claimed the unavailability of dumping sites for biodegradable wastes. Finding shows that the respondents had encountered various problems in waste disposal practices.

Table 4. Problems encountered by the respondents.

PROBLEMS ENCOUNTERED	FREQUENCY	PERCENTAGE (%)
Lack of discipline/cooperation	36	72
Lack of area for composting	21	42
Irregular collection/Poor method of collecting garbage	10	20
Inadequate knowledge of recycling	7	14
Poor dissemination of ordinance	6	12
Unavailability of dumping sites	5	10

*Multiple responses

Possible Solutions to the Encountered Problem

Table 5 shows the possible solution to the encountered problems of the respondents. The respondents (74%) suggested solutions on the problems they encountered on waste disposal were: the establishment of a barangay ordinance that prohibit, 36%, the provision of equipment/facilities for garbage disposal, and 26% suggested the suitable dumping sites for biodegradable wastes because the garbage collectors just left the bio-waste on the collection sites. Others (4%) suggested that there must be seminars on recycling wastes.

Table 5. Possible solutions on the encountered problems regarding waste disposal.

POSSIBLE SOLUTIONS	FREQUENCY	PERCENTAGE (%)
Establish barangay ordinance regarding waste disposal	37	74
More equipment's/facilities	18	36
Suitable dumping site	13	26
More seminars regarding waste management and recycling	2	4

*Multiple responses

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The study was on the assessment of the solid waste disposal practices at barangay Betag, La Trinidad, Benguet. The study was conducted to satisfy the following: to determine the socio-demographic profile of the respondents, the types of solid waste materials that the respondents dispose every day, the solid waste disposal practices/methods of the respondents, and the problems encountered by the respondents on solid waste disposal practices.

Interview schedule with survey questionnaire were used to gather the data and information imperative to the study on the assessment of solid waste disposal practices from 50 individuals who were randomly selected as respondents of the study.

Finding indicates that majority of the respondents are females. The highest age group ranged from 15 to 20 and the lowest age group ranged from 61 to 70. Majority were married and were Roman Catholics; and engaged in housekeeping.

The types of solid waste that the respondents disposed before the scheduled time of collection/segregation: for non-biodegradable wastes they disposed; plastics, cans, bottles/glass diapers and sanitary napkins whereas for the biodegradable wastes, the respondents disposed vegetable peelings, fruit peelings, papers, kitchen left overs and cartons/boxes.

With regards to the methods of disposing non-biodegradable and biodegradable waste materials by the respondents were through recycling, garbage collection, backyard pit and composting.

The problems met by the respondents on solid waste disposal were: lacked of discipline/cooperation, lacked of area for composting and poor method of collecting garbage.

Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. Respondents were young, literate, and expressed more environmental concerns than older respondents because they hesitate changing what had been traditional.
2. Respondents disposed most non-biodegradable waste like the cans, plastics, bottles/glass, diapers and sanitary napkins than the biodegradable wastes which are mostly composted like the vegetable peelings, fruit peelings, and papers.
3. Respondents practiced composting, garbage collection, recycling, and selling to garbage scrappers.
4. The possible solution to the problems encountered is to establish a barangayordinance.

Recommendations

To help address the various problems of Barangay Betag, La Trinidad in waste disposal the following recommendations were proposed:

1. It is recommended that non-biodegradable and biodegradable wastes must be properly utilized, recycle or reuse if it is necessary. Encourage residents to undergo seminars regarding proper wastes management and skills training on the technologies of waste disposal.

2. The strict compliance to RA 9003, provisions of Dugad Mu Shalosim, and other ordinances regarding waste disposal management.
3. The respondents must forward their problems to the barangay officials for possible action.
4. Monitoring among barangay officials on waste disposal.
5. Respondents must learn to cooperate to the ordinances being implemented by the barangay officials in order to minimize the problems they are had met.

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