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Social Work Interventions and Ecological Solid Waste Management of Indigent Households

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Abstract

Aim: Social work skills and knowledge are useful in addressing effects and mitigating environmental degradation specifically on the issue of improper waste management. Hence, this study determined the extent of social work interventions and ecological solid waste management of indigent households at Barangay Malobago, Daraga, Albay.

Methodology: This study utilized a descriptive correlational design to be able to assess and describe the effect of the intervention provided by the members of the Universidad De Sta. Isabel to the community in Barangay Malobago, Daraga, Albay. It focused on providing a detailed and accurate representation of the data that will be collected relative to awareness of Solid Waste Management concepts and its compliance vis a vis the social work intervention. Data was collected from the representative of the whole population of the resettlement site. This is intended to increase the reliability and validity of the data. A 100% sampling or the total number of populations of the community was surveyed.

Results: Findings of the study showed that the extent of social work interventions in ecological solid waste management to the households on the four processes of ecological solid waste management (generation, collection, transportation, and disposal) was very high. Additionally, the extent of compliance of the community on solid waste management indicated general compliance to the ESWM indicators. This implies that the involvement and interventions of social workers are considered of utmost importance as what was experienced in the locale of the study and that there tend to be a strong positive relationship among all the variables. Furthermore, there were factors deemed related to social work interventions organized into themes on community openness vis a vis government or non-government interventions, advocacy, community organizing, and role of local government unit (barangay and municipal level). Also, factors on ecological solid waste management were determined focusing on knowledge of environmental laws and solid waste management, policies and Barangay Solid Waste Management Committee, LGU, NGO, and GO support, establishing materials recovery facility (MRF) and road infrastructure, and community practices and behavioral change.

Conclusion: Based on the findings, it can be deduced that there is a need for social work interventions to be more proactive and preventive to stop and prevent further environmental degradation and its impact to society. Also, strengthen the existing interventions to the community for sustainability. This requires creative application of the existing social work skills to environmental issues and to further develop and broaden the knowledge and skills encompassing the unrelenting issues on the environment that affect the well-being of the human person.

Keywords: *Social Work Interventions, Ecological Solid Waste Management, Indigent Households, Environmental Issues*

INTRODUCTION

The problem of waste management has long been documented in human history, dating back to the dawn of civilization. Humans generate waste in the course of their daily lives, which is then managed according to the culture to which they belong. Solid waste management will continue to overwhelm local governments and national governments as urban populations grow and consumption patterns change around the world. In one of the UN forums, it was brought up that one of the most pressing issues in today's time is improper waste management which needs to be addressed as it affects all land, air and water.

In the Philippines, all sectors of the country produce thousands of solid wastes daily and in the Bicol Region alone, each person generates an estimated 0.30 kg of solid waste every day and there is an estimated 1.11 million



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tons projected waste per year for 5 years (2020-2025) (DENR EMB, 2020). This reality is projected to persist and rapidly increase as positive development in the country is expected in the coming years. The increase in solid waste can be attributed to several factors which include but not limited to the spiraling population growth rate, rapid urbanization, public indifference, and the changing lifestyle of the population resulting to the increased consumption of goods.

The aspect of Environmental Social Work attempts to expand and strengthen its historic commitment in the "Person-In-Environment" perspective. But the increasing recognition on the part of many social work practitioners that the environmental crisis (crisis of nature) was having a profound impact upon the clients. These prompted many social workers to suggest that social works idea of environment needed to be expanded to include issues of nature and environmental degradation. One main cause on the issue on health and wellness that affects people is improper waste management. The problem on waste management results to a wide range of environmental problems such as air and water pollution etc. This exacerbates the problem on health especially during the pandemic and continues on. Thus, health being a societal issue is one very important concern which a Social Worker can be involved in.

The stereotype role of Social Work during disaster and calamities are relief distribution and psychosocial intervention in most government and private agencies. It is a challenge therefore for this aspect of Social Work practice to be able to accelerate the compliance to pertinent laws of its clients and thus address the issues of environmental degradation and health and wellness. Social work interventions in solid waste management primarily focus on raising awareness, educating communities about proper waste disposal practices, promoting behavioral change, and empowering communities to take ownership of waste reduction initiatives, often through community engagement and capacity building strategies, to address the social and environmental impacts of improper waste management. (Patil & Varghese, 2021)

The contribution of the Universidad de Sta. Isabel as a higher education institution is by providing students and interns to immerse in the community, expose them to real life issues and to provide various interventions based from their specific discipline. Based on the initial interview with some local officials of the Village, the Social Work student interns were among the main group who stayed with them and conducted various activities in the village including trainings regrading solid waste management.

This study therefore assessed the extent of social work interventions and ecological solid waste management of the indigent households in this Vincentian village at Brgy. Malobago, Anislag, Daraga Albay.

Objectives

This study aimed to determine the extent of social work interventions and ecological solid waste management of indigent households at barangay Malobago in Daraga Albay.

Specifically, it sought to answer the following questions:

1. What is the extent of social work interventions in the ecological solid waste management of households in the community in terms of:
 - a. Generation
 - b. Collection
 - c. Transportation
 - d. Disposal
2. What is the extent of compliance on solid waste management of the community?
3. Is there a significant relationship between intervention and degree of compliance?
4. What factors are related to social work interventions and ecological solid waste management of the community?
5. What social work interventions may be recommended based on the results of the study?

Hypothesis

There is a significant relationship between the social work interventions provided and degree of compliance of the households.



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METHODS

Research Design

This study utilized a descriptive correlational design to be able to assess and describe the effect of the intervention provided by the members of the Universidad De Sta. Isabel to the community in Barangay Malobago, Daraga, Albay. It focused on providing a detailed and accurate representation of the data that will be collected relative to awareness of Solid Waste Management concepts and its compliance vis a vis the social work intervention. Data was collected from the representative of the whole population of the resettlement site. This is intended to increase the reliability and validity of the data. A 100% sampling or the total number of populations of the community was surveyed. The data was gathered through a survey questionnaire that was distributed to the respondents and tailored to capture information relevant to the study's aims

Population and Sampling

In this study, data was collected from the three hundred thirty (330) households of the resettlement site. This was intended to increase the reliability and validity of the data. A 100% sampling or the total number of populations of the community was surveyed.

Instrument

The study used a validated researcher-made survey questionnaire to gather the respondents' insights. The survey questionnaire intended for the respondents in each household was composed of three parts; (1) Social Work Interventions; (2) Degree of Compliance; and (3) Factors Related to Social Work Interventions and Ecological Solid Waste Management. Additionally, the researcher used the Likert Scale for part I and II of the questionnaires in order to answer problem 1 and 2. The researcher administered the questionnaires to the respondents in acquiring the data needed and an interview guide was also crafted for the focus group discussion in order to validate or verify their answers.

Data Collection

In the conduct of this study, the researcher embarked on the step-by-step procedures from the data gathering until the processing of data. Before the conduct of data gathering, the researcher sought the approval of the Dean of the Graduate School of the Universidad de Sta. Isabel to be able to proceed. After the data gathering ended, presentation, analysis, and interpretation of data followed and sought help with a statistician.

Treatment of Data

The researcher used the Pearson Correlation Coefficient as the tool to analyze and interpret the significant relationship between the two variables in this study. Using these tools, interpretation of the pertinent data became more efficient. It is known as the best method for quantifying the relationship between these two variables of interest because it is based on the method of covariance. It reveals the magnitude and direction of the relationship, or correlation, between intervention and compliance. Thus, provided an insight on how the academe could influence practices of communities they engage in relative to academic programs they offer.

Ethical Considerations

The researcher provided the participants in the study an oral and written explanation of the study's aim, their right to refuse to participate, their comprehension of the study's confidentiality boundaries, and their right to a copy of the results if they so desire.



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RESULTS and DISCUSSION

Table 1

Social Work Interventions in the Ecological Solid Waste Management of Households in terms of Generation		
Indicators	Mean	Interpretation
Orientation on environmental laws (Republic Act 9003 or the Ecological Solid Waste Management Act of 2000)	3.56	VH
Orientation on proper waste segregation and collection	3.43	VH
Orientation on the different types of solid wastes	3.42	VH
Training on processing of recyclable waste materials to alternative products	3.35	VH
Assistance in creating an ecological solid waste management system in the barangay based on the LGU's plan	3.33	VH
Training on composting and backyard gardening	3.32	VH
Follow-up visits in the implementation of proper waste segregation at home	3.32	VH
Focus group discussions on the existing solid waste management system of the barangay	3.29	VH
Organizing/re-organizing the Barangay Solid Waste Management Committee	3.29	VH
Information Education Campaign with distribution of materials such as posters, brochures, flyers or pamphlets, etc.	3.23	H
Mean	3.35	VH

Legend: VH – Very High (3.25 – 4.0), H – High (2.5 – 3.24), L – Low (1.75 – 2.49), VL – Very Low (1.0 – 1.74)

The practice of Solid Waste Management in their original location at Malobago was quite different and more of traditional practice compared to what they learned and practiced at the Vincentian Family Village where they were relocated according to the residents. Tables 1 to 4 presents the extent of social work intervention in terms of generation, collection, transportation, and disposal of wastes relative to ecological solid waste management of this community. Given the varied role of a Social Worker, this study delved on the intervention particularly on ecological solid waste management.

The interventions provided focused on the four key processes. Table 1 shows the social work interventions in terms of solid waste generation. Interventions provided among others were either through trainings, seminars or dialogues that helped in minimizing waste generation at home and helped with the compliance of the households. Based on the results, the overall mean of all the indicator is 3.35, which is interpreted as very high intervention. According to the data, the nine (9) indicators had a mean ranging from 3.29 – 3.56 all interpreted as very high intervention and there is one (1) which falls within high intervention having a mean of 3.23.

The intervention that got the highest mean is 3.56 on orientation of environmental laws specifically Republic Act 9003, then on proper waste segregation and collection at 3.43, and on the different types of solid wastes at 3.42. From the data presented there was a very high intervention on the initial stage of waste management. This is the part which awaken their awareness on the basic principle of SWM. The very high intervention indicated that their awareness and interest have been caught and influenced how they followed through the other stages. Acceptance usually follows awareness if given the complete information and motivation on the merits of complying with the law.

This finding supports the study of Baltazar et al. (2022) on "Household Waste Production and Disposal: Perception and Behavior of Sampled Households in Barangay Looc, Calamba City", which characterized the current solid waste management system in Calamba City, Philippines and the household waste production and disposal in one of its flood-prone barangays, Looc in which they concluded that the awareness of households to proper waste disposal practices and to the concept of "waste management as public goods" should be raised so that they get motivated to contribute to waste management.

This further showed that the social work interventions provided to the community with regards to waste generation at the household level focused more on raising awareness and educating them of the basic knowledge on proper waste management. The social workers and the social work students assigned to immerse in the community prioritized providing trainings or orientation regarding various topics such as Republic Act No. 9003 and other environmental laws, proper waste segregation and segregated collection, and the different types of solid wastes.



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Table 2

Social Work Interventions in the Ecological Solid Waste Management of Households in terms of Collection

Indicators	Mean	Interpretation
Assistance in coordinating with LGU for the schedule of wastes collection	3.38	VH
Assistance in the establishment of Materials Recovery Facility (MRF) or drop off center	3.32	VH
Dialogue with the barangay and LGU on ecological solid waste management-related undertakings	3.31	VH
Organized a local group of eco-aides to oversee the Materials Recovery Facility's operation	3.29	VH
Training on eco-gardening to establish communal garden	3.27	VH
Dialogue on resolutions to institutionalize incentives to eco-aide and fines/penalties to violators	3.24	H
Dialogue in exploring possible partnerships with recycling centers/junkshops	3.23	H
Organized training on Waste Analysis and Characterization Study (WACS) with DENR	3.20	H
Dialogue on incentive scheme to encourage participation of households in activities such as "Trash for Rice", "Basura palit Gamit", etc.	3.15	H
Follow-up meetings to monitor implementation of ecological solid waste management system	3.15	H
Dialogue on the establishment of local solid waste management fund or fees	3.13	H
Mean	3.24	H

Legend: VH – Very High (3.25 – 4.0), H – High (2.5 – 3.24), L – Low (1.75 – 2.49), VL – Very Low (1.0 – 1.74)

Table 2 presents the extent of social work interventions in the segregated waste collection, the second part of the ecological solid waste management process. The overall mean rating obtained based on the data presented is 3.24 which could be interpreted as high intervention. This result shows that there were high interventions provided by the social workers to the community in the collection process. However, three indicators showed very high intervention such as assistance in coordinating with LGU for the schedule of wastes collection (3.38), assistance in the establishment of Materials Recovery Facility (MRF) or drop-off center (3.32), and conducted a dialogue in coordinating with the LGU regarding ecological solid waste management (ESWM) related undertakings and activities (3.31). In this aspect, even though the overall result was interpreted as high intervention, there were still indicators with mean ratings interpreted as very high intervention. Based from actual observation of the Researcher although a Materials Recovery Facility had not been fully established due to fund constraint as expressed by the barangay captain, there was already a temporary drop off center where the recyclable waste was regularly collected. A garbage truck regularly collects the waste accumulated in the drop off storage container located near the Barangay Hall.

Findings reveal that the interventions were focused on establishing the ecological solid waste management system by first putting in place a segregated waste collection process. The first step in the segregated collection process is to establish a day or two for community collection, followed by a pick-up schedule that is well-coordinated with the LGU. If the Materials Recovery Facility is not available, a temporary drop-off center should be established to serve as pick-up point for the truck. Additionally, there should be a dialogue with community stakeholders so that they can understand and adhere to the municipality's current ESWM system in coordination with the LGU. Costs should also be considered in the process. As far as this component is concerned given the mean implying high intervention, from what was observed by the Researcher the system was being put into place. A need for high intervention on assistance to properly mobilize the local officials to source out fund to fully establish the Materials Recovery Facility not just a drop off center or point as mandated by law has been determined in this study.

The study of Svensson (2020) attested that the main goal of a waste collection strategy is to collect in a timely and economical manner, as much correctly source separate waste as possible, in order to ease the subsequent waste sorting and/or treatment stage with the aim to maximize re-use and recycling. The result in Table 2 recognized the aspect on which the intervention should be prepped up.



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Table 3

Social Work Interventions in the Ecological Solid Waste Management of Households on Transportation of Wastes Collected

Indicators	Mean	Interpretation
Assistance in sourcing out waste transportation equipment such as eco-bike	3.43	VH
Assistance in identifying best routes for waste collection	3.32	VH
Seminar on the use of Personal Protective Equipment (PPE)	3.28	VH
Stakeholder's dialogue to reiterate that only the residual or non-biodegradable wastes are collected	3.27	VH
Mean	3.32	VH

Legend: VH – Very High (3.25 – 4.0), H – High (2.5 – 3.24), L – Low (1.75 – 2.49), VL – Very Low (1.0 – 1.74)

Table 3 presents the social work interventions on transportation of wastes collected. Based on the results of the data gathered, the overall mean obtained is 3.32 meaning very high intervention. The remaining indicators which also got an interpretation of very high intervention are assisted in sourcing out equipment such as eco-bike for use in transporting the wastes collected (3.43), assisted in identifying best routes or path for waste collection (3.32), conducted seminar on the use of Personal Protective Equipment (PPE) in handling all types of solid wastes (3.28), and finally conducted a dialogue with the community people, barangay officials especially with the committee on solid waste management to reiterate that only the residual or non-biodegradable wastes are collected (3.27).

Findings revealed that social work interventions in terms of transporting the wastes collected from households to the Materials Recovery Facility (MRF) or drop-off center focused on establishing an efficient and strategic way to implement the segregated collection process as well as prioritize the safety and well-being of not just the households but the eco-aides as well who are directly handling the solid wastes.

Assisting the barangay in sourcing out equipment to be used by eco-aides in doing house-to-house segregated collection to MRF sorting and identifying best routes within the area for strategic collection of wastes either house-to-house or per zone are interventions explored as the barangay was having a hard time looking for possible budget or fund to purchase eco-bikes since it was. Such was the difficult for eco-aides to use a three-wheeled cart collecting and transporting wastes.

Social workers advocate on behalf of individuals and communities to increase their access to necessary resources such as housing, food, and health care. Social work advocacy ranges from small-scale actions that impact individuals to large-scale programs that impact entire communities and society as a whole (Tulane, 2021). Such was what was achieved in this part of the study where resource mobilization which was facilitated by the Social Worker as shown on what they were able to assist the barangay.

Table 4

Social Work Interventions in the Ecological Solid Waste Management of Households on Disposal of Wastes Collected

Indicators	Mean	Interpretation
Dialogue to reiterate the stakeholder's role in the ESWM Program	3.23	H
Organized stakeholder's meeting for sustainability planning/other considerations	3.16	H
Dialogue on best practices from other barangays/LGUs for possible adoption	3.11	H
Organized meeting for feed backing/monitoring and evaluation	3.09	H
Dialogue to reiterate the minimum requirements of RA 9003 in terms of disposal	3.02	H
Dialogue to reiterate the enforcement of fines and penalties per RA 9003	2.99	H
Mean	3.10	H

Legend: VH – Very High (3.25 – 4.0), H – High (2.5 – 3.24), L – Low (1.75 – 2.49), VL – Very Low (1.0 – 1.74)

Table 4 presents the social work interventions in terms of the disposal of wastes generated. Mean obtained was 3.10 if interpreted shows high intervention. The three highest indicators were the conduct of a dialogue to reiterate the role of the LGUs, barangays, and households in the ESWM program (3.23) organized stakeholder's meeting for sustainability planning and other considerations (3.16) and conducted a dialogue to present the best practices from other barangays/LGUs for possible adoption (3.11).

Findings of the study revealed that there were high interventions provided even up to this process of solid waste management. This focused more on how to deepen and reinforce the understanding of the whole ecological solid waste management given that this is the last part of the process and to ensure its sustainability. The disposal of different types of wastes varies from household to household but awareness of its proper disposal is of utmost importance, and should be their responsibility but backed up by the barangay. In order to mitigate the negative impact



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of waste disposal and to improve the recovery rate of waste, it is imperative to implement appropriate waste segregation practices at the household level (Meng et al., 2022).

Table 5
Summary of Social Work Intervention on the
Solid Waste Management Process

Solid Waste Management (SWM) Process	Mean	Interpretation
Generation	3.35	VH
Collection	3.24	H
Transportation	3.32	VH
Disposal	3.10	H
Mean	3.25	VH

Legend: VH – Very High (3.25 – 4.0), H – High (2.5 – 3.24), L – Low (1.75 – 2.49), VL – Very Low (1.0 – 1.74)

The mean of the different indicators per component showed that very high intervention had been provided by the Social Worker on the generation (3.35) and transportation of waste at 3.32. Both on the part of collection and disposal, it showed high intervention at 3.24 and 3.10 mean of the different indicators identified. This result showed that even if the overall total mean yielded a result of 3.25 which is very high intervention it might be an opportunity to analyze what more can be provided by the Social Worker to ensure full compliance to the law on ESWM.

The results showed that knowledge, participation, and the active involvement of the local communities are key components in achieving sustainable waste management. Shaping individuals' attitudes and awareness is vital for promoting pro-environmental behaviors in developing countries. The results also showed a prominent focus on recycling behavior and an extensive use of the theory of planned behavior. This aspect is where Social Worker can be actively involved.

According to Raab (2024), waste management is a major challenge faced by many developing countries, underlining the relevance of this study. Even when academia tries to shed light on this field, it often fails to consider that waste management must be approached differently in less developed countries, which differ dramatically from advanced countries, especially about consumers' behavioral characteristics. This literature contributes to the field by illuminating focal points in research on the background of solid waste management and the disposal behavior of people living at the base of the pyramid. It explores how research results can guide scholars and practitioners who are contributing to a positive shift in waste management practices. Its novelty arises from annotating theories and managerial approaches that promise to advance the understanding of sustainable waste management in developing countries.

Degree of Compliance in Solid Waste Management

Table 6
Degree of Compliance to Ecological Solid Waste Management

Indicators	Mean	Interpretation
Waste segregation at home	3.40	VH
Separate trash bins or container for each type of wastes	3.40	VH
Strategic location of trash bins or containers away from animals and safe from rainwater	3.29	VH
Segregated waste collection in the barangay	3.26	VH
Clean-up drives and other related activities	3.26	VH
Shared knowledge on proper waste management to relatives and friends	3.20	H
Attendance to trainings and seminars regarding proper waste management	3.18	H
Collection of recyclable wastes by junkshops	3.16	H
Minimal use of plastics or other non-biodegradable materials	3.15	H
Re-using or recycling of old stuffs	3.15	H
Proper cover and labeling for trash bins or containers	3.08	H
Backyard composting or other biodegradable wastes processing	3.05	H
Presence of a family member during waste collection	3.04	H
No burning any types of wastes	3.01	H



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Wearing Personal Protective Equipment (PPE) in handling special/hazardous wastes.	2.77	H
Mean	3.16	H

Legend: VH – Very High (3.25 – 4.0), H – High (2.5 – 3.24), L – Low (1.75 – 2.49), VL – Very Low (1.0 – 1.74)

The findings in this study as to compliance would show an example of how a community through its households was able to comply with the basic practices required on proper solid waste management. The findings showed that the households have been properly guided and sustainable compliance can be assured since they were able to absorb the basic knowledge on proper waste management coupled with the assistance of the Local Government Unit. The mean (3.16) of all the indicators meaning high compliance was an indication that there was still room for improvement in the intervention provided to achieve very high compliance.

The role of households in the practice of Ecological Management is of utmost importance. The main generator of waste is basically the household. Poor waste disposal practices hamper the progress towards an integrated solid waste management in the household. In this study, the degree of compliance of the 330 households in terms of ecological solid waste management was studied as influenced by interventions provided. The result is presented in Table 6.

Significant Relationship between the Extent of Social Work Interventions and Degree of Compliance

Table 7
Correlations

Parameters	P-value	R-value	Interpretation
Generation	.000	.682	Strong positive correlation
Collection	.000	.727	Strong positive correlation
Transportation	.000	.627	Strong positive correlation
Disposal	.000	.671	Strong positive correlation
Mean	.000	.747	Strong positive correlation

Social work basically aims to promote social change and development, social cohesion and the empowerment of the people. Rambaree (2020) and Mahees (2021), Marelo and Helwege (2020) established the role and contribution of social workers in environmental protection, preservation and development. Thus, the relationship of social work interventions in terms of compliance of the households in ecological solid waste management being a major issue in environmental protection showed another aspect of the role of this profession or academic discipline.

The results of the analysis using the Pearson's Correlation Coefficient showed that there were statistically significant relationships between all the areas of intervention including its overall mean and compliance and correlation which showed significance at 0.01 level (2-tailed). On the extent of intervention in terms of generation (.682), collection (.727), transportation (.627) and disposal (.671) it showed a strong relationship with the degree of compliance of the households on ecological solid waste management. With an overall value of .747, this indicates that there is a strong positive relationship among all the variables. The significance having figures less than .05 indicate that there are indeed significant correlations between the said variables.

As observed from the previous results, the interventions whether very high or high which was provided to the residents to a great extent tend to have a strong relationship with the compliance to Solid Waste Management. It is a promising result which supported the premise that there was a significant relationship between intervention and compliance. The social workers although with not much technicality or expertise on the technical aspect of the law was able to raise awareness and encouraged acceptance and adoption and played a significant role to the community's compliance to the law.

These results showed the potential of exploring other strategies to be able to respond to the problem on Ecological Solid Waste Management. Challenges that hamper better implementation of RA 9003 includes non-segregation of solid waste by residents attributed to lack of awareness and discipline; irregular garbage collection etc. as expressed in many literatures and studies and evident in many communities of the country. Addressing these concerns will further boost RA 9003 compliance and enhance the implementation and monitoring in the communities.



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Factors related to Social Work Interventions and Ecological Solid Waste Management

The social work interventions' relationship with the ecological solid waste management of the indigent households of barangay Malobago resettlement site were influenced by several factors which was organized into various themes on community openness vis a vis government or non-government interventions, advocacy, community organizing, and role of local government unit (barangay and municipal level). Also, factors on ecological solid waste management were determined focusing on knowledge of environmental laws and solid waste management, policies and Barangay Solid Waste Management Committee, LGU, NGO, and GO support, establishing materials recovery facility (MRF) and road infrastructure, and community practices and behavioral change as attested by the respondents who were invited during the focus group discussion. What transpired during the focus group discussion was narrated and included the verbatim of the respondents.

Proposed Plan of Interventions:

Areas of Concern	Plan Component/ Method	Action Steps	Timeline	Persons Responsible
Environmental Education through Social Work Engagement				
Social Preparation	Objective 1 To conduct community organizing activities for indigent households in the community	a. Exploring – Understand the community and its needs through observation b. Group organization – creating a group of people who are committed to working together c. Listening – listening to the community needs specifically to the different sectors through immersion d. Research – gathering information about the community and its issues (CNA) e. Action – involves taking steps to address the community needs and concerns	1 month	LGU, MSWDO, Academic Institutions
Advocacy	Objective 2 To develop and promote Information, education materials	a. Review plans (themes or topics) b. Identify work activities c. Organize the tasks into Manageable units d. Assign tasks- delegate authority and assign tasks e. Prepare IEC materials based on priority issues f. Promote through various modes	1 month	LGU, MSWDO, Academic Institutions
Community Development	Objective 3 To conduct massive information drive on environmental issues and solid waste management	a. Organize the core groups b. Choose the topics to promote c. Find resources d. Segment your target audience e. Create a Schedule of events Programs & initiatives f. Create action plans for the Campaign g. Find partners and influencers h. Implement the action plan i. Evaluate the campaign j. Continue ongoing awareness	2 Months	LGU, MSWDO, Academic Institutions
	Objective 4 To conduct trainings, workshops and other Capability Building Activities	a. Conduct Training needs assessment b. Prepare Training Design/ Training Plans c. Create training materials d. Conduct Trainings e. Evaluate trainings	4 months	LGU, MSWDO, Academic Institutions



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	Objective 5 To mobilize resources and assist in fund sourcing activities	a. Identifying resource needs b. Conducting resource mapping exercise c. Developing a strategy d. Identifying schedule e. Building relationships f. Crafting compelling messages g. Selecting mobilization channels h. Monitoring and evaluation efforts i. Ensuring readiness to attract resources to achieve project goals	1 month	LGU, MSWDO, Academic Institutions
Stakeholder Engagement	Objective 6 To access partnership and collaboration from both government and non-government institutions and other stakeholders to address social issues in the community	a. Identify and analyze stakeholders b. Plan and implement actions to influence stakeholders c. Improve and operational transparency	2 weeks	LGU, MSWDO, Academic Institutions
Monitoring and Evaluation	Objective 7 Conduct Participatory Monitoring and evaluation	a. Develop Indicators b. Collect data c. Analyze data d. Monitor outputs e. Conduct baseline and final evaluation f. Share results g. Reflect on Data	1 month	LGU, MSWDO, Academic Institutions
Documentary Protocol	Objective 8 To develop a protocol of step-by-step SW interventions from the experience gained for sustainability replication	a. Document the whole process b. Compile reports c. Prepare sustainability plan d. Craft the portfolio e. Promote and share	1 month	LGU, MSWDO, Academic Institutions

Conclusions

Based on the findings, it can be deduced that there is a need for social work interventions to be more proactive and preventive to stop and prevent further environmental degradation and its impact to society. Also, strengthen the existing interventions to the community for sustainability. This requires creative application of the existing social work skills to environmental issues and to further develop and broaden the knowledge and skills encompassing the unrelenting issues on the environment that affect the well-being of the human person.

Recommendations

1. The respondents may be actively and consciously involved in the ecological solid waste management processes and system of the barangay, be open to learning and continuously have an open mind for future assistance by different agencies and institutions. This could also be an additional reference for them to have a better understanding of their primary role in properly managing household wastes in accordance to the law.
2. To the Vincentian Family Village or the community, they can make use of this study as basis to formulate policies and establish a more effective, efficient, and ecological solid waste management system in the barangay. This could also be a reference for them to have sufficient information on the impact of interventions with regards to solid waste management and be able to recognize the areas for improvement in their community.
3. To the Social Workers, this may serve as an eye-opener to explore this underrated field which highlights the crucial role of the profession and its contribution to environmental preservation. This could also educate and raise awareness to be actively involved in the growing interest of the profession in expanding the extent of practice and interventions on issues of the environment.



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4. To academic institutions, the social work department, and other related courses, they may continue to include and implement programs, projects, and activities to address environmental problems especially on solid waste management. This could provide inputs/data bank which can be used to improve further academic undertakings such as field instruction or community immersion and the like given the tripartite function (Instruction, Research, and Extension) of a university or academic institution.
5. To the Local Government Units, this may aid them to identify or improve appropriate measures and basis for sound policy formulation in addressing concerns regarding compliance to RA 9003 or the ecological solid waste management act of 2000. This could also help on how they could come up with appropriate and better programs/projects to strengthen ESWM implementation and augment funds in their respective barangays.
6. To the Department of Environment and Natural Resources – Environmental Management Bureau, they may use the study as a feedback mechanism on evaluating the effectiveness of the IRR of RA 9003 vis a vis community compliance thus, support policy formulation and assistance to Local Government Units and barangays. Also, they may employ social workers to handle or focus on the social aspect of technology transfer to the community like values formation and community organizing.
7. To other agencies or institutions, they may collaborate and explore possible strategies to be able to respond to environmental problems specifically on improper waste management. They may also include social workers in the planning, implementation and policy-making process.
8. To future researchers and students, be able to use this study as their reference/ source to enhance their academic endeavors and undertake further investigations that are similar to this subject matter.
9. To academic institutions, they may undertake further researches and extension programs and projects to address issues on the environment in order to support policy formulations and the implementation of environmental laws. Also, to encourage the students to be actively involved in environmental protection and preservation.

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