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An Assisted Community Based Implementation of RA 9003 (ACBI RA 9003): The Baranggay Naisud, Experience

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Abstract

In the Philippines, higher-education institutions like Aklan State University (ASU) are empowered to implement community programs that bring inclusive human and community development. The ASU, College of Hospitality and Rural Resources Management (CHARRM), Bachelor of Science in Environmental Science (BSES) implemented an extension program titled "Enhancement of Communitybased Implementation of RA 9003: Ecological solid Waste Management of 2000." Thus, this study examined the influence of the extension activity to the partner community. Specifically, the study seeks to: describe the perceived influence of the assisted community-based implementation of RA 9003 to the household-based waste management practices; ascertain the perceived influence of the extension activity to the school based waste management practices; identify the perceived influence of the extension activity to the community; and describe the recommendations of the partners to improve the delivery of the activity. Descriptive research design was employed in the study. The respondents of the study were 120 residents, selected through purposive sampling technique. The data were gathered using a validated questionnaire checklist at Naisud, Ibajay Aklan from August to October 2021. The results revealed that majority of the respondents claimed that the activity enabled the household to reduce waste generated and practice recycling. In terms of its influence to the school-based waste management practices, majority of the respondents agreed that school personnel and students were engaged in the implementation of RA 9003. Likewise, the community strictly prohibited the open burning of garbage. The LGU may sustain the good practices by strictly monitoring the compliance of the community to RA 9003. The BSES may duplicate the activity to other barangays that include the recommendations made by the community. Consequently, to better understand the implication of the activity, further study along this line is recommended.

Keywords: RA 9003; Community Extension ; household ; Waste Management

Background of the Study

Waste disposal is a serious problem that the community is facing today. A number of communities have designed strategies to help lessen the environmental impact of the waste generated by the population. Household waste has evolved into a core urban challenge, with an upsurge in the volume of waste being



generated. In addition, more complex material decompositions often contain toxic and hazardous elements (Gutberte, J and Uddin SMN, 2017)

Waste thrown away by the people may damage the earth resources. It can lead to the erosion of natural components, as well as consume the community's energy and cause the loss of lives and financial drain. Hence, proper regulation of waste is vital to reduce the environmental effect of waste disposal. It is also to minimize the use of resources spent in waste disposal activities.

In the Philippines, the government launched reforms to promote the environmental cause (Baula, 2010). Republic Act 9003, otherwise known as the Ecological Solid Waste Management Act of 2000, provides the necessary policy framework, institutional mechanism, and mandate to the local government Unit (LGU) to achieve waste reduction though establishing an integrated solid waste management plan.

Moreover, the Commission on Higher Education (CHED), by virtue of Republic Act 7722, mandates higher-education institutions, such as state colleges and universities, to respond to the call for societal transformation through the delivery of services to the community.

The Aklan State University, College of Hospitality and Rural Resources Management, Bachelor of Science in Environmental Science (ASU- CHARRM) with its desire to contribute to the waste reduction advocacy, implemented an extension program titled "Enhancement of Community-based Implementation of RA 9003: Ecological solid Waste Management of 2000." The main objective of the program is to reach out to the Naisud community, leading to its enhancement.

The partners of the implementers were the barangay officials, 4P's household beneficiaries, and the Naisud Central. This extension program covered series of seminars and training workshops facilitated by the faculty and students of the ASU CHARRM Environmental Science Department.

The program included three major activities: Activity 1, the Establishment of household-based waste management practices; Activity 2, the Enhancement of School- based waste management practices; and Activity 3, the Strengthening of community-based practices and policies on waste management.

Likewise, there is a need to find the influence of the extension activity delivered by BSES program to the community. It is essential to determine the outcome of the program like the response of the community towards it, as well as to strengthen evidences, if the program address the gap appropriately.

The study is inspired by the sustainable development goals specifically on climate action and life on land. Likewise, the regional research and extension agenda 2018-2022, encourages to conduct research and extension activities that support the generation of new knowledge, pertaining to government initiatives, in order to promote the inclusive growth and development of the nation. This research endeavor is also anchored on the thrust of the university, the needed natural resources, and environmental protection.

Hence, this study helps identify the extent of the utilization of valuable resources within the university, and if it benefits the target clienteles. The information will serve as a guide in planning related activities for the institution.

Objectives of the Study

This study is designed to measure the influence of the assisted community-based implementation of RA 9003 at Barangay Naisud Ibajay, Aklan.

Specifically, the study seeks to:

1. Describe the perceived influence of the assisted community-based implementation of RA 9003 to the household-based waste management practices of residents.



- 2. Ascertain the perceived influence of the assisted community-based implementation of RA 9003 to the school based waste management practices in Naisud.
- 3. Identify the perceived influence of the assisted community-based implementation of RA 9003 to the community-based waste management practices.
- 4. Describe the need of the community to improve the delivery of the extension activity.

Methodology

Respondents

The respondents of the study were the selected 120 residents of Barangay Naisud. Purposive sampling technique was used in selecting the respondents. The respondents were categorized into 3. The first category, Category A was composed of household heads who answered questionnaires regarding the household-based influence of the ACBI RA 9003. Meanwhile, Category B were asked about the school-based influence. This category included teachers, students, parents, and guardians. Category C, who completed questionnaire for community-based influenced, were those involved in running community activities, such as members of the Sanguniang Kabataan, Barangay Tanod, and the like. Purposive sampling was used to select the respondents of the study, since the data were gathered during the pandemic, where movement was limited. Only those that can be accessed by the enumerator were considered as respondents of the study.

Based on the data gathered, Category A respondents were mostly high school graduates, between 26-35 years old. Majority were female and were self-employed. On the other hand, the respondents for Category B were mostly college graduates, between 36-45 years old. A majority of them were female and were students. Likewise, for Category C, most were college level, below 25 years old, and were female. A great number of them were students.

Ethical Consideration

The ethical consideration was prioritized in this study. The respondents' informed consent were sought before they participated in the study. They were informed about the purpose and possible outcome of the study. It was explained to them their right to privacy or confidentiality, that their participation was voluntary and they may withdraw their participation anytime without penalty.

Data gathering instrument

To gather the data, the researchers designed a questionnaire checklist, intended for the purpose of the study. The initial draft of the questionnaire was submitted to the expert for content validation. Based on the juror's comments and suggestions, the questionnaires were improved.

There were four sets of questionnaires used in the study: Set A was about the influence of ACBI RA 9003 to the households; Set B was about the influence of ACBI RA 9003 to the school; and Set C was about the influenced of ACBI RA 9003 to the community.

The three sets of questionnaire checklists have three (3) parts: Part 1 was about the personal profile of the respondents. Part 2 sought information on the influence of ACBI RA 9003, while Part 3 solicited suggestions from the respondents on how to improve the delivery of the extension activity.

Place and Time of the Study

The study was conducted at Naisud ,Ibajay Aklan from August to October 2021.



Statistical Analysis

The data were collected using descriptive statistics, specifically the frequency and percentage.

Results and Discussion

Perceived Influenced of the Assisted Community-based Implementation of RA 9003 to Household Waste Management Practices

Based on the results, majority of the respondents revealed that the assisted community-based implementation of RA 9003 informed them on how to properly dispose hazardous household waste. Additionally, it enlightened them that when buying products for household use, they should pick products with less packaging (34 or 85% respectively). Respondents further manifested that the activity helped them practice the reusing or recycling of materials (32 or 80%). It also motivated them to practice waste segregation (30 or 75%). Likewise, it enabled them to compost the organic waste generated from their households (29 or 75.2%). The activity also enabled them to do electronic transactions when paying household bills to minimize the use of paper (28 or 70%), and it encouraged them to give away items that are in good condition, but are of no use in the household (26 or 65 %), and it inspired them to limit the usage of single use plastics (24 or 60 %). The results imply that the households are open to the ideas of reducing their waste and disposing them properly. These findings are contrary to Bernardo's (2008) study, conducted in Metro Manila in which the respondents claimed that garbage collection and disposal is the government's responsibility.

Perceived Influenced of the Assisted Community-based Implementation of RA 9003 to the School Waste Management Practices

The respondents manifested that the community assisted implementation of RA 9003 influenced the waste management practices in school. Majority of the respondents disclosed that it motivated them to provide bins in the school premises for segregation of different kinds of waste (36 or 90%); enthused staff and students to practice recycling, reusing, and composting (35 or 87.5%); motivated the school to involve staff and students in the conduct of environmental awareness (34 or 85%); discouraged them to practice open burning of garbage in the school ground (33 or 82.5%) and encouraged the school to have a systemized monitoring of its waste management practices (32 or 80%). The results further signify that it motivated the school to design a waste management plan to support the RA 9003 implementation (25 or 62.5%), and it encouraged the school to conduct a waste assessment to determine the type and amount of waste the school is generating (20 or 50%). These signify that the school community is cooperative with the program. The results are similar to the study of Baula (2010). The study synthesized the experiences of the teachers, students, and administrator in the implementation of the solid waste management. The study emphasized that the participation of the student body, administrator is critical in achieving the solid waste management program.

Perceived Influenced of the Assisted Community-based Implementation of RA 9003 to the Community Waste Management Practices

In terms of the influenced on the community of the assisted implementation of RA 9003, the results revealed that it helped the community put up a program for the utilization of valuable reusable items (38 or 95 %); enabled community to prohibit the throwing of trash in the open ground (35 or 87.5 %); drove



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the community to forbid the open burning of trash (34 or 85 %); helped the community to start an initiative of composting organic waste (33 or 80 %). Moreover, it motivated the community to put up a material recovery facility (MRF), (30 or 75%); inspired the community to strictly practice waste segregation; and helped the community to have direct engagement in the implementation of RA 9003 (28 or 70 %). The results signify that the community embraced the activities delivered by the BSES program. They are also willing to practice the waste management ideas they gained from the intervention.

Recommendations to Improve the Delivery of the Extension Activity Based on the Experience of the Respondents

Based on the felt need of the respondents to improve the delivery of the extension activity, the results indicated that the respondents recommended the following strategies: the implementers may clearly present their sustainability plan to enable the activity to continue, even if the program is terminated (86 or 55 %); to get more committed people to join the activity (83 or 69 %); make the delivery of the program easy to understand by using terminologies appropriate to the level of participants (80 or 66.7 %); to recruit participants based on the objectives of their program (78 or 65 %); and to conduct similar extension activities to offer a livelihood to displaced workers and to tap community members to inform other people about the program (66 or 55 % respectively).

Conclusions

- 1. The extension activity of the BSES program in assisting the community in the implementation of RA 9003 positively influenced the household's waste management practices. The activity enabled the household to reduce waste generated and practice recycling of the reusable waste.
- 2. The activity motivated the school community to put up bins for waste segregation conduct waste management assessment, as well as to engage personnel and students in the implementation of RA 9003.
- 3. The activity influenced the community to stop open burning and practiced proper disposal of waste.
- 4. To improve the implementation of the activity, the community partner suggested that the implementers must present clearly the sustainable plan of the activity, get more committed individuals to join the advocacy, and conduct similar activities in the future, designed to guide community partners to start a livelihood endeavor.

Recommendations

- 1. Considering that the activity had resulted positive influence to the waste management practices of the community, LGU Naisud may sustain it by strictly monitoring the compliance of the community to RA 9003.
- 2. DepEd Naisud may adopt the best practices of the activity to inspire and motivate the school population to sustain the implementation of RA 9003.
- 3. ASU BSES program may continue their environmental advocacy and improve their activity design. It should be based on the findings and implement similar program in other barangays.
- 4. To better understand the implication of the activity, further study along this line is recommended.



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APPENDICES

Personal Data of the Respondents

Table 1.A Personal Data as Revealed by the Respondents of Household –Base Category

| Personal Data | F | % |
|-----------------------|----|------|
| 1.Educational | | |
| Attainment: | 5 | 12.5 |
| some years in | 4 | 10 |
| elementary | 8 | 20 |
| elementary graduate | 10 | 25 |
| some years in high | 6 | 15 |
| school | 7 | 17.5 |
| high school graduate | | |
| with units in | | |
| college/college level | | |



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| college graduate | | |
|------------------------|----|-------|
| | | |
| | | |
| | | |
| Total | 40 | 100% |
| 2.Age: | | |
| 25 years old and below | 8 | 20 |
| 26 to 35 years old | 10 | 25 |
| 36 to 45 years old | 7 | 17.5 |
| 46 to 55 years old | 10 | 25 |
| 46 to 55 years old | 5 | 12.25 |
| Total | 40 | 100% |
| 3.Gender | | |
| Female | 28 | 70 |
| Male | 10 | 25 |
| LGBT | 2 | 5 |
| Total | 40 | 100% |
| 4.Occupation | | |
| Fisherman | 6 | 15 |
| Self Employed | 18 | 45 |
| Government Employee | 4 | 10 |
| Private Employee | 5 | 12.5 |
| Farmer | 2 | 5 |
| Student | 4 | 10 |
| Driver | 1 | 2.5 |
| Total | 40 | 100 |

Table 1.B. Personal Data as Revealed by the Respondents of School- based Category

| Personal Data | F | % |
|---------------------------|----|------|
| 1.Educational | | |
| Attainment: | 3 | 7.5 |
| some years in elementary | 6 | 15 |
| elementary graduate | 5 | 12.5 |
| some years in high school | 6 | 15 |
| high school graduate | 4 | 10 |
| with units in | 13 | 32.5 |
| college/college level | 2 | 5 |
| college graduate | 1 | 2.5 |
| with MA units | | |



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| MA (full-fledge) | | |
|------------------------|----|-------|
| (iun nougo) | | |
| | | |
| | | |
| | | |
| Total | 40 | 100% |
| 2.Age: | | 10070 |
| 25 years old and below | 18 | 45 |
| 26 to 35 years old | 5 | 12.5 |
| 36 to 45 years old | 5 | 12.5 |
| 46 to 55 years old | 7 | 17.5 |
| 46 to 55 years old | 5 | 12.5 |
| Total | 40 | 100% |
| 3.Gender | | |
| Female | 24 | 60 |
| Male | 15 | 37.5 |
| LGBT | 1 | 2.5 |
| Total | 40 | 100% |
| 4.Occupation | | |
| Fisherman | 3 | 7.5 |
| Vendor | 2 | 5 |
| Government Employee | 6 | 15 |
| Private Employee | 6 | 15 |
| Farmer | 2 | 5 |
| Student | 18 | 42.5 |
| Driver | 4 | 10 |
| Total | 40 | 100% |

| Table 1.C. Personal Data as Revealed by the Respondents of School- based Category |
|---|
|---|

| Personal Data | F | % |
|-------------------------------------|----|------|
| 5.Educational Attainment: | | |
| some years in elementary | 3 | 7.5 |
| elementary graduate | 6 | 15 |
| some years in high school | 5 | 12.5 |
| high school graduate | 6 | 15 |
| with units in college/college level | 13 | 32.5 |
| college graduate | 4 | 10 |
| with MA units | 2 | 5 |
| MA (full-fledge) | 1 | 2.5 |
| Total | 40 | 100% |



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| | 1 | 1 |
|------------------------|----|------|
| 6.Age: | | |
| 25 years old and below | 18 | 45 |
| 26 to 35 years old | 9 | 22.5 |
| 36 to 45 years old | 1 | 5 |
| 46 to 55 years old | 7 | 17.5 |
| 46 to 55 years old | 5 | 12.5 |
| Total | 40 | 100% |
| 7.Gender | | |
| Female | 24 | 60 |
| Male | 15 | 37.5 |
| LGBT | 1 | 2.5 |
| Total | 40 | 100% |
| 8.Occupation | | |
| Fisherman | 3 | 7.5 |
| Vendor | 2 | 5 |
| Government Employee | 6 | 15 |
| Private Employee | 6 | 15 |
| Farmer | 2 | 2 |
| Student | 18 | 45 |
| Driver | 4 | 10 |
| Total | 40 | 100% |

Table 2. Influenced of an Assisted Community- based Implementation of RA 9003 to Household Waste Management Practices

| A. Influenced of ACBI - RA 9003 to household-based waste | F | % |
|---|----|------|
| management practices | 1 | 70 |
| It motivated our household to practice waste segregation. | 30 | 75 |
| It helped our household practice reusing or recycling of materials. | 32 | 80 |
| It inspired us to limit the usage of single use plastic in our household. | 24 | 60 |
| It encouraged us to carry our own shopping bag when going to the market. | 26 | 65 |
| It gave idea that when buying, products for household use, we pick products | 34 | 85 |
| with less packaging. | 54 | 85 |
| It motivated us to use glass battle for storage instead of plastic. | 25 | 62.5 |
| It enabled us to compost the organic waste, we generated from our household. | 29 | 72.5 |
| It enabled us to do electronic transactions when paying household bills to | 28 | 70 |
| minimize the use of paper | 20 | 70 |
| It inspired us to give away items that are in good condition but are of no use in | 26 | 65 |
| our household. | 20 | 05 |
| It gave us idea how to properly dispose hazardous household waste. | 34 | 85 |



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Table 3. Influenced of an Assisted Community- based Implementation of RA 9003 to School Waste Management Practices

| B. Influenced of ACBI -RA 9003 to school -based waste management practices | F | % |
|--|----|------|
| It motivated us to provide bins in the school premises to be used to segregate different kinds of waste. | 36 | 90 |
| It enthused staff and students to practice recycling, reusing and composting. | 35 | 87.5 |
| It motivated the school to use organic waste for composting and to fertilize school gardens. | 32 | 80 |
| It discouraged us to practice open burning of garbage in the school ground. | 33 | 82.5 |
| It motivated the school to conduct activities that promote waste based management. | 32 | 80 |
| It encouraged the school to conduct waste assessment to determine the type and amount of waste the school is generating. | 20 | 50 |
| It motivated the school to design waste management plan to support the RA 9003 implementation. | 25 | 62.5 |
| It encouraged the school to integrate waste-education in the delivery of teaching and learning. | 34 | 85 |
| It motivated the school to involve staff and students in the conduct environmental awareness | 35 | 87.5 |
| It encouraged the school to have a system of monitoring it's waste management practices. | 32 | 80 |

 Table 4. Influenced of an Assisted Community- based Implementation of RA 9003 to Community

 Waste Management Practices

| C. Influenced of ACBI -RA 9003 to community -based waste | F | % |
|--|----|------|
| management practices. | Г | 70 |
| It motivated the community to put up material recovery facility (MRF). | 32 | 80 |
| It inspires the community to strictly practice waste segregation. | 30 | 75 |
| It helped the community to have direct engagement in the implementation of RA 9003 | 28 | 70 |
| It enabled the community to have a tracking record of waste collection and reduction. | 26 | 65 |
| It led the community to strictly implement the waste segregation. | 30 | 75 |
| It helped the community put up program for the utilization of valuable reusable items. | 38 | 95 |
| It helped the community to start initiative of composting organic waste. | 33 | 82.5 |
| It motivated the residents to get involve in the community clean-up drive activities. | 31 | 77.5 |
| It enabled community prohibit the throwing of trash in the open ground. | 35 | 87.5 |
| It drove community to forbid open burning | 34 | 85 |



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| Table 5. Respondents' Recommendations to the Im | prove the Delivery of the Extension Activity |
|---|--|
| ruble 5. Respondents Recommendations to the m | iprove the Denvery of the Extension Heavity |

| Recommendations | F | % |
|---|----|------|
| Figure out the specific needs of the community | 78 | 65 |
| Get more committed people to join your activity | 83 | 69 |
| Tap community members to inform other people about your program. | 66 | 55 |
| Use the social media to reach out the community. | 63 | 52.5 |
| Recruit participant based on the objectives of your program | 78 | 65 |
| Make the delivery of your program easy to understand by using terminologies appropriate to the level of participants. | 80 | 66.7 |
| Present your sustainability plan clearly to enable the activity to continue even the program is terminated. | 86 | 71.7 |
| Conduct another extension activity purposely for livelihood to give job to the displaced workers . | 66 | 55 |