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Fostering a Humane and Green Future: Pathways to Inclusive Societies and Sustainable Development



GREENING A SELECTED COMMUNITY IN THE PHILIPPINES: HAPPY BERDE MULANAY

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Abstract: The research project addresses the United Nations Sustainable Development Goal 11 which is related to green communities. Goal 11 states "Make cities and human settlements inclusive, safe, resilient and sustainable". Mulanay was the selected community where several engagements have been done since 2010 by the authors. The aim of the project is to assist and guide Mulanay officials realize their dream to make Barangay Santa Rosa a green community. Several literatures have dealt on experiences related to efforts on greening cities and towns. At the same time, a benchmarking visit of a Sustainable Smart Town of Fujisawa in Tokyo was made. Meanwhile, site visits and assessment were made on Barangay Santa Rosa. Interviews and Focus Group Discussions were also done. Also, training and orientation of the LGU officials and stakeholders on the project were done.

Based on these activities, the following were agreed by the LGU and the stakeholders on greening Barangay Santa Rosa: (1) Establishment of a green building for their new town hall; (2) Relocation of residents along the coast of Tayabas Bay in a Green Resettlement area; (3) Make a Green Market; and (4) Make a Green Bus Terminal.

Key Words: Mulanay; Green Town; Sustainability; Inclusive; Environment

1. INTRODUCTION

The United Nation Summit launched the 2030 Agenda for Sustainable Development in New York on September 25-27, 2015. It is aimed at ending poverty in all its forms. The UN 2030 Agenda envisions "a world of universal respect for human rights and human dignity, the rule of law, justice, equality and non-discrimination" (UNDP WEBSITE). There are 17 goals and one of them is related to Green Communities. Goal 11 states "Make cities and human settlements inclusive, safe, resilient and sustainable". Goal 11 has ten targets and cover the following: provision of housing and upgrading of slums; access to transportation and improvements in road safety; enhancing capacities for human settlements planning

and management; protection of cultural and natural heritage; reduction in the economic and human loss caused by disasters; mitigation of the adverse environmental impact of cities, particularly through waste management; and access to safe, inclusive and accessible green and public spaces. At the same time, it also highlights the importance of adopting and implementing integrated policies towards mitigation and adaptation to climate change, and support to urban resilience.

The 17 goals serve as a guide for United Nations Development Program (UNDP) policy making and funding. The strategic plan of UNDP focuses on areas like poverty alleviation, democratic governance and peace building, climate change and disaster risk, and economic inequality.

Fostering a Humane and Green Future: Pathways to Inclusive Societies and Sustainable Development



UNDP provides support to governments to integrate the SDGs into their national development plans and policies. This work is already underway, as UNDP supports many countries in accelerating progress already achieved under the Millennium Development Goals. Our country lacks valuable experience and policy expertise on working with many and across multiple goals to ensure the targets set out in the SDGs are reached by 2030. Thus, achieving the SDGs requires the partnership of governments, private sector, civil society and citizens too to make sure we leave a better planet for future generations.

ADB defined a green, livable and sustainable Asian City as one having some or all of the following elements: (1) low level of environmental and climate change impacts; (2) inclusive development and engaged residents; (3) resilience to disasters and other shocks; (4) cultural and historic preservation and (5) green spaced and walkability (Lindfield, M. & Steinberg, F., 2011, 2012)

Having worked with Mulanay in Quezon Province since 2010 made us highly engaged in the plan of the former Mayor, Joselito Ojeda, to make the town green. In Mulanay, JSPS Alumni Association of the Philippines or JAAP presented an output of a workshop with the Mayor and his officials in 2016 in establishing a Green town. The output is summarized in Figure 1.

OUTPUT OF JAAP WORKSHOP - Oct. 2, 2016

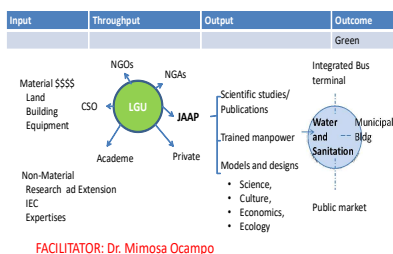


Fig. 1- Output of JAAP workshop (Mulanay, 2016)

So far, among the plans presented, the improvement of water resources as well as sanitation has been addressed. Still in the pipeline is the establishment of the Green Market, Integrated Bus

Terminal and Green Municipal Building. More recently, after the May 2019 election, the greening of the resettlement area has been added to the plan of the new Mayor, JT Ojeda. This study aims to provide a guide to a selected town (Mulanay) in developing a Green Community.

2. Methodology

The methodology is summarized in Figure 2.

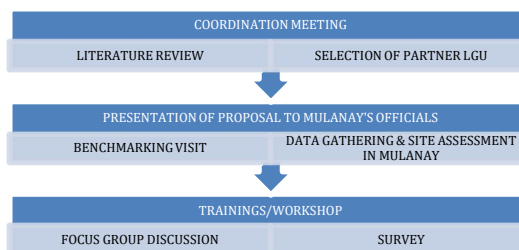


Fig. 2- Flow of the methodology

3. RESULTS AND DISCUSSIONS

The following are results of the Benchmarking visit, interviews and Focus Group Discussions (FGD) conducted in Mulanay in 2019.

3.1. Sustainable Smart Town-Fujisawa: A Model of Green Community in Asia

The SST-Fujisawa visit and tour took place on June 20, 2019. The Sustainable, Smart Town of Fujisawa was opened in 2014 in Fujisawa City, Kanagawa Prefecture, Japan. It is a joint project between the private and public sectors, which involves, partner companies promoting advanced initiatives, and Fujisawa City itself. The main feature of this project is an actual smart town with 1,000 households. It is a town is with advanced technology-based infrastructure, but based on actual lifestyles.

A 100-year vision of the project was made and then established guidelines for town and community designs. Residents sharing the objectives of the town live, interact and exchange ideas for achieving better lifestyles. The town management company took the resident views into consideration, incorporate new services and technologies, and continuously support the sustainable evolution of the town. security,



Fostering a Humane and Green Future: Pathways to Inclusive Societies and Sustainable Development

mobility, wellness, community and also in emergencies.

It is a sustainable town that incorporates the gifts of nature into a smart lifestyle. The green community potential of the town are: (1) Abundant natural environment of Shonan; (2) Citizens with high environmental awareness and (3) Development of Commercial and educational functions. However, the community challenges are (1) realizing high environmental goals; (2) strengthening community disaster prevention and (3) alleviation of chronic traffic jam. There were three guidelines made to meet overall targets. These are (1) Project design guidelines; (2) Town design guidelines; (3) Community design guidelines.

3.2 History of Mulanay and its Development

The office of the Mayor provided the following data in 2019. The profile of Mulanay is shown in Table 1. According to a legend, Mulanay was derived from “malunay” which means plenty of “lunay”. Lunay refers to “pili wax” which was abundant in the area and was used by the town’s folk as source of heat and light.

Table 1 – Profile of Mulanay (RCBMS, 2015)

| | |
|----------------------|--|
| Municipality class | First class |
| Land area | 32, 000 Ha |
| Water area | 25,000 Ha |
| Location | 272 km SE of Manila; 3 rd district of Quezon Province |
| Population | 52, 724 (26, 914 male; 25, 810 female) |
| Labor force | 18, 226 |
| Number of households | 11, 384 |
| Number of Barangays | 24 rural; 4 Poblacions; 10 coastal areas |
| Livelihood | 51.07%Agriculture; 10.77%Wholesale & Retail trade; 4.82%Fishing |

The municipality is being considered to be listed in the tentative list for UNESCO World Heritage Site inscription due to its architectural marvels, notably its baroque church, its preserved ancestral houses, and the limestone tombs of Kamhantik, a highly-significant Tagalog

archaeological site and dambana, in the Buenavista Protected Landscape.

During the term of Mayor Joselito Ojeda, “Happy Berde Mulanay” was his flagship program. His goal was to achieve full harmonization and convergence of programs, projects and activities from the national government down to the local level in order to create and sustain greener environment. In consonance with E.O. No. 26 of former President Benigno Aquino, the local government initiative for “Clean and Green Todo Todo Project of Mayor Joselito Tito Ojeda” was called Happy BERDE Mulanay: The Museum of Trees-Municipality.

Former Mayor Joselito Ojeda had several projects in the development of Mulanay. He had worked with public sector, private sector (like De la Salle University) and Non-Government Organizations (like JAAP). During his term, he planned to do the Greening of Mulanay. Among the plans is the construction of a green market, green bus terminal, green resettlement area and the green town hall. All of these are to be located in Barangay Santa Rosa.

3.3 Barangay Santa Rosa

Santa Rosa is a barangay in the municipality of Mulanay, in the province of Quezon. Its population as determined by the 2015 Census was 3,697. This represented 6.96% of the total population of Mulanay. The population of Santa Rosa grew from 2,002 in 1990 to 3,697 in 2015, an increase of 1,695 people. It has a total land area of 940 Has. with almost 90% of its total area is devoted to agriculture.

Brgy. Sta. Rosa has its own complete elementary school with 1 Pre-school classes, 2 sections for grades I, and 1 section for grades II – IV. Polytechnic University of the Philippines (PUP) Mulanay Campus and Bondoc Peninsula Agricultural High school are also situated in this Barangay.

There are two Barangay Health Station strategically located at Sitio Central and Sitio Bulagsong. The Barangay is only 1 kilometer from the Poblacion where the Municipal Health Center is located.

Sta. Rosa is accessible by any kind of transport vehicles. From Poblacion proper to Sta. Rosa, route tricycles can be found at Poblacion II of the Mulanay Tricycle Operators and Drivers Association (MUTODA) Terminal. It is also accessible

Fostering a Humane and Green Future: Pathways to Inclusive Societies and Sustainable Development



through the Mulanay River and Tayabas Bay by motorized boat and banca.

The water supply needs of the Barangay is met through its Level II Water System. At present, the barangay has 2 communal top stand faucets that serves 186 households at Sitio Central and Malaking Bato. The rest are common deep wells and majority is bottled mineral water. 338 or 48.42% of the total number of households is without access to potable water. These 338 houses have not yet been reached by the present water system because they are situated in the elevated, hilly portions of the barangay.

The Barangay is electrified by QUEZELCO I. The latest RCBMS (2015) survey shows 15% of the total households or 106 households are still without electricity.

Most residents of the barangay utilize backyard garbage pits in disposing their trash while some resort to open-pit burning. As of the moment, the barangay do not have its own Material Recovery Facility.

Sta. Rosa is as a whole peaceful. It has 16 deputized barangay tanods who patrol the barangay streets during critical hours. There is no record of crime in the barangay in the last 12 months (as per RCBMS Survey 2015).

The barangay has a relatively high rate of healthy population. In fact, the RCBMS Survey 2015 shows that there are only 16 cases of children aged 0-5 who are malnourished in the barangay. This is attributed to the existence of a Feeding Program in the barangay which is part of the Day Care Program of the Department of Social Welfare and Development. The close monitoring of these children by the Barangay Health Workers is also seen as one of the reasons for this as well.

In Barangay Sta. Rosa, the most commonly used kind of toilet is the water-sealed type. 20.2% or 141 households in the barangay have no access to sanitary toilets. These 141 households are mostly shanties and makeshift dwellings located along the roadside that has no means of constructing their own sanitary toilets.

In the barangay very few of the households live in either makeshift houses or informal dwellings. Only 154 of the 685 households are squatters, most of them can be found along the Coast of Pan Philippine Highway. Only 1.86% of households on the other hand live in makeshift dwellings which are mostly made of nipa and other indigenous materials.

The primary source of livelihood in Brgy. Sta. Rosa is agriculture. A vast portion of its total land area is devoted to coconut. There are 1163 members of the labor force in the Barangay. Among these members only 108 or 9.29% are unemployed which is comprised of 62 males and 46 female.

3.4 Results of the Workshop/Focus Group Discussion

The participants were divided into 4 groups. Group 1 represented the Public Market, Group 2 represented the Bus Terminal, Group 3 is for the Municipal Hall and Group 4 is for the resettlement area.

Table 2 shows the summary of the activities during the FGD/Workshop. The results are discussed below.

Table 2- Activities during the FGD

| | |
|--|---|
| Part 1- Unfreezing/Getting to know | 48 participants; 4 facilitators; 1 speaker |
| Part 2- 1st Workshop/FGD: Giving insights on the word "Green" | Question 1: What comes into your mind when you hear the word green? |
| Part 3- 2nd Workshop/FGD: Each group was asked to select an object (using their bodies) that create a scenario that answers the 2nd question. | Question 2: What is the existing condition of your Public Market, Municipal Hall, Bus Terminal and your desired situation, and how will you achieve your desired condition? |
| 4th Part: Presentation of the project by Susan Gallardo, the lead proponent | Greening a Selected Community in the Philippines |
| 5th Part: 3rd Workshop/FGD: Formulation of Principles and Policies | Question 3: What are the different strategies your group would suggest in order to successfully achieve your desire? |
| 6th Part: 4th Workshop/FGD: Perceived Roles and Responsibilities | Using Venn Diagram and meta cards, show your commitment by posting your individual perceived roles and responsibilities for the project. |

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For Part 1, there were 4 groups created from among the 48 registered participants from the Sangguniang Bayan ng Mulanay, LGU, Transportation Association, Sangguniang Barangay of Sta. Rosa, Philippine National Police, Bureau of Fire Protection, educators from PUP, BPAHS, and Sta. Rosa Elementary School, and officers and members of Sta. Rosa Homeowners Association.

When asked their notion of the word green in Part 2, the 4 groups came up with a consensus answers consisting of prosperity, cleanliness, progress, wealth, nature, safety, peace and orderliness, cooperation, unity. Some unique answers are pro-life, intelligence, flora-fauna. All the answers are essentially part of the elements of a green community. Thus, most participants have slight idea about the greening project.

To answer the question in Part 3, Group 1 chose STONE as the object symbolizing the Public Market — its present situation, the group's desired condition and the strategies to be used to achieve their desired conditions. Stone because the present situation of Mulanay public market is something that is causing problem and headache to the consumers, the business owners in the market and to the persons in authority who are implementing regulations and policies. It is like stones which are hard — problems seemed to be hard to resolve. The present building is not really a good one and does not provide the needs of both the consumers and the stall owners. Stone because the group is foreseeing a new public market built in durable stones and high-quality materials like a fortress that will last a lifetime. A new public market that is clean, well-organized, a place that would promote socio-economic well-being of the town folks of Mulanay, a totally Green Public Market. Stone because in order to achieve the group's desire, we need people who are strong, men of principles and dignity who will carry out productive planning and implementation, and who will sustain the goal of attaining the desired conditions.

For Group 2, the object they chose was a bus. In their wacky faces and positions, they conveyed the existing condition of the bus terminal in Mulanay as disorganized and troublesome. Sometimes, misunderstanding arises. There are non-systematic policies, and no ideal bus terminal at all. Their desired condition is to have a more convenient terminal that goes together with new and sound policies and system.

Group 3 chose a building as the object that represent the existing/desired conditions for the Local Government Building. They simulated an old building which was represented by old members of the group where overcrowding and uncomfortable condition can be seen. Then, their desire condition (presented by younger group members) is to have new and durable building where there is big space for each offices; the employees are working comfortably as well as the clients who are transacting business. To achieve their desire, they said that they would act as one community joining hands together in planning and resourcing.

The object which Group 4 had chosen was a house. Currently, there are people that have no house of their own, some have houses that are mostly worn out, the environment is topsy-turvy. The desired situations are: for the residents to have a house of their own, to have happy homes, and to fix their worn out houses. Ways to bridge the gap: planning, looking for resources, building houses, distribution of houses for those who are qualified owner.

After the presentation of the project proposal, the participants were enlightened on how the Barangay can become a Green Community through their new market, bus terminal, municipal hall, and resettlement area. The 4 groups came out with different strategies in order to achieve their desired green market, green bus terminal, green municipal hall and green resettlement area.

Group 1 came up with the following strategies that would be employed in order to achieve the desire of having an ideal and green PUBLIC MARKET: (1) visibility of more plants around the market and proper maintenance of these plants; (2) utilization of solar panel as alternative source of energy; (3) accessibility of the public market site; (4) assurance of a safe location and wide parking space; (5) proper waste segregation and disposal; (6) changes and discipline among people; (7) sustainability of water supply for the maintenance and cleanliness; (8) security for both the consumers and business owners; (9) prioritizing Mulanayin entrepreneurs/business owners; (10) proper area allocation to stores per classification.

For Group 2 on Green bus terminal, People Empowerment is what they were proposing which means people have sense of ownership. There should be clear policies which must be presented to the

DLSU RESEARCH CONGRESS 2023

MANILA, PHILIPPINES

JULY 5-7, 2023

Fostering a Humane and Green Future: Pathways to Inclusive Societies and Sustainable Development



people. These are the strategies the group would like to employ: 1. orderliness (ordinances enacted and followed); 2. disaster preparedness; 3. resiliency (utilization of renewable energy); 4. proper waste management; 5. rain water collection; 6. provision of clean restrooms, clean water; 7. creation of clear policies and sustainable plan; 8. political will; 8. strict implementation of “No Corruption” policy; 9. installation of CCTV cameras and free wifi; 10. construction of “pasalubong” area.

Group 3 proposed the following for a Green Municipal Hall. There should be plan, discipline, big space, hydroponics, environmental awareness, solar energy, clean water resources, covered path walk, full implementation of Municipal Ordinance for Clean and Green, backyard gardening, waste segregation. Discipline, cooperation and industry must be adopted in order to achieve a Happy Green Mulanay.

Group 4 on Green resettlement area, the following were the strategies formulated.

a. From the government: 1. accurate plan, source of fund, program of work, lupa, solar street lights, timely waste collection, clean source of water, wet/dry market, Community Health Center, parking area.

b. From the settlers: livelihood, chapel, fund from bank, backyard gardening, proper waste segregation, trainings on community awareness.

Lastly, the participants identified the following common perceived roles and responsibilities they will play to achieve a green community: implementor, monitor, supporter, for education and information.

The FGD/Workshop activities were published in the Newsletter of the BPAHS and the results were submitted to the Office of Mayor JT Ojeda for adoption.

5. CONCLUSION & RECOMMENDATION

The greening of Mulanay specifically Bgy. Santa Rosa has started in 2019 with the construction of the new public market and bus terminal and the plan to construct a new municipal hall and resettlement area. With the results of the FGD and workshop, Mulanay officials, its residents and other stakeholders are clear in their notions of a green community and their roles and responsibilities.

Strategies for greening Bgy. Santa Rosa have been formulated. Mulanay officials should now continue to pursue what has been started by previous administration in Bgy. Santa Rosa and duplicate it to other Barangays in the town.

The project was implemented before the pandemic. Several changes could have taken place like new administration, safety and health protocols, infectious waste management and social distancing which may affect the different strategies proposed. Thus, there should be a follow up project to address these changes.

6. ACKNOWLEDGMENTS

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