

Rainforestation Implementation and Durkheim's Notion of Mechanical Solidarity: From the Experiences of the Pioneering Adopters of the Cienda San Vicente Farmers Association in Baybay City, Leyte

Guiraldo C. Fernandez, Jr.^{1*} and Marlito Jose M. Bande²

¹ Department of Liberal Arts and Behavioral Sciences, Visayas State University, Baybay City, Leyte

² Institute of Tropical Ecology and Environmental Management, Visayas State University, Baybay City, Leyte

ABSTRACT

Rainforestation is a technology designed to make use of unproductive lands by planting native tree species which are not widely used in the Philippine government's reforestation program. In ensuring that rainforestation would be effectively implemented, the Visayas State University (VSU) with the help of the German Cooperation Agency (GIZ) has entered into a partnership with the Cienda San Vicente Farmers' Association (CSVFA) in Baybay City, Leyte. More than twenty years after implementation, the CSVFA rainforestation farm is presently standing in Barangay Gabas, Baybay City, Leyte. It is in this aspect that this study would investigate whether or not Durkheim's notion of mechanical solidarity had served as a factor for the success of the existing demonstration farm especially in its implementation stage. Using the method of interpretative textual analysis and key informant interviews through hermeneutic phenomenology, this study concludes that 1) the achievement of the pioneering rainforestation adopters is inspired by their collective drive to protect of what is left of the natural environment; 2) this study also concludes that the success of CSVFA rainforestation efforts is also attributable to the nature of their society which is somewhat pre-industrialized and small – a clear manifestation of Durkheim's mechanical solidarity, and lastly; 3) this study also concludes that the very notion that there is no personal property in relation to their notion of ownership to the rainforestation demonstration farm and that there is only the existence of collective property drives people to care for it and work for the sake of its well-being. With this, this paper has arrived at a general conclusion that Durkheim's notion of mechanical solidarity is construed to be one of the significant factors in the implementation and success of the CSVFA rainforestation farm.

KEYWORDS: *collective property, environment conservation, Pre-industrialized society, social cohesion*

1 INTRODUCTION

Environment conservation is one of the most pressing concerns of many of the citizens of this contemporary era. With the emergence of environment related disasters happening for the past few decades, it is not a surprise that people tend to find ways and innovate means to address and mitigate said disasters' effect. In the 1990s alone, several catastrophic climate-induced calamities found its way to the shores of the Philippines. For instance, in November 5, 1991, Typhoon Uring (International name Thelma) bore down in Ormoc City, Leyte wreaking havoc and burying the city in water, sediments, and debris. More than 4,000 people were killed in the flash floods, 3,000 people were injured, and about 2, 500 more were reported missing (Franciso, 2016). Not only that, a year earlier, on November 13, 1990, Typhoon Ruping (International name Mike) rampaged Cebu City and the whole of the Visayas and left more than 700 people dead and destroy billions of pesos worth or properties (Avila, 2013). These events enabled a number of Filipinos to arrive at a realization that since it was the natural environment that caused such undesirable things to happen, it was just right for people to find ways to take care of the natural environment. In line with this, the Visayas State University (VSU) came up with a tool to address said environment related disasters. This paved way for the emergence of rainforestation in the later years of the 1990s.

Rainforestation is a technology designed to make use of unproductive lands by planting native tree species which are not widely used in the Philippine government's reforestation program (Milan and Ceniza, 2009). This technology found its way to Visayas State University (VSU) since in 1990, the Philippine-German Applied Tropical Ecology Project started to look into possibilities of rehabilitating former forested areas to get back the ecological functions of the degraded areas needed for poverty alleviation through sustainable rural development. This program was directed for the promotion of biodiversity rehabilitation, conservation of remaining primary forests and natural resources, and the development of a closed canopy and high diversity forest farming system called rainforestation. The directives of the program were formulated so that

*corresponding author: guiraldo.fernandez@vsu.edu.ph

Received: 17 March 2018; Accepted: 16 April 2018

p-ISSN: 2599-4875 e-ISSN: 2599-4980

©Cebu Technological University, R. Palma St. corner M.J. Cuenco Ave., Cebu City, 6000 Philippines

Rainforestation could replace the wide spread slash-and-burn practices and protect and enhance biodiversity by using indigenous trees only. In 1994 the hypothesis was formulated that a farming system in the humid tropics would increasingly be more sustainable the closer it was in its species composition to the original local rainforest (Goltenboth and Tropentag, 2005). With this, the ecological functions of a given ecosystem would be re-established while subsistence farmers would be given daily sources of income.

Yet, a question emerged on why rainforestation was pushed and advocated by Visayas State University in the 1990's. The answer to said question was simply discernible in the goal of rainforestation which was to simply contribute to the government's thrust of reforestation in order to bring back basic ecosystem functions and in the long run sustain the needs of the future generations of Filipinos. The goal of Rainforestation was designed to cater the problem of deforestation which had already destroyed a great quantity of Philippine forests and Philippine biodiversity. According to Haribon Foundation (2016), Biodiversity in the Philippines was one of the richest in the world. It was part of the 17 mega diverse countries which collectively claim two thirds of all global species. Yet, 70% of Philippine forests had vanished from the 1930s to 1988 (Haribon Foundation, 2016).

There are two major causes of Philippine forests loss. They refer to the conversion of primary forests to secondary forests by both legal and illegal logging as well as the removal of secondary forests cover by expansion of upland agriculture (Fernando, 2005). With this, farmers have been the mostly affected sector of deforestation in Philippine society because their way of life is closely in touch with the natural environment. However, the Philippine government has not taken this phenomenon lightly. Because of this, massive reforestation has been initiated by the government. However, though the Philippine government has introduced programs to rehabilitate denuded lands, the efforts of both government and private sectors have not been enough to abate the rapid deforestation rate of Philippine forests (Kalikasan People's Network, 2011). Not only that, decades long of reforestation efforts using fast growing exotic species have led to the alteration of Philippine rainforests into simply forests plantation which have failed to bring back ecosystem functions (Haribon Foundation, 2005). After all, exotic trees cannot replace Philippine native trees because they are not suited to Philippine climate (Ranada, 2014). Hence, rainforestation is a good program since it brings back Philippine native tree species which has long been lost and would also bring back ecosystem functions since Philippine trees are very adaptable to Philippine climate

Since its introduction, rainforestation was disseminated by Visayas State University and was declared one of the official reforestation methods of the Philippines' Department of Environment and Natural Resources (DENR) in 2004. As mentioned earlier, rainforestation was also designed to provide a staggered income from high-value timber, fruit trees, spices, and

medicines. The technology had also increased biodiversity in rainforestation sites since it helped restore soil productivity and protected the watersheds on degraded sites (Schneider *et al.*, 2013). Hence, at the start of the early 1990's, a number of rainforestation sites had been established in the different parts of the country. It was during these times that people, predominantly farmers, were recruited to adopt Rainforestation technology.

It is in this aspect that this study would delve into the features that manifest Durkheim's notion of mechanical solidarity and evaluate if such notion is one of the significant factors in the success of rainforestation implementation for the past twenty plus years. As construed in Sociology, mechanical solidarity is built on similarity and is also strongly related to a 'collective consciousness'. For Durkheim, mechanical solidarity exists because a certain number of states of consciousness are common to all members of the same society. The share it has in the general integration of society plainly depends upon the extent, whether great or small, of social life included in the common consciousness and regulated by it. The stronger is the collective consciousness, the more there is space for mechanical solidarity (Schiermer, 2014). In mechanical solidarity, the emphasis is on the link between likeness and cohesion. As a member of a close-knit assembly, one cannot but show solidarity. Individual members' identification with the collective conscience compels them to. Should differences become apparent that are not legitimated by the existing status hierarchy, group members will feel a moral compulsion to alleviate them. Moreover, the alleviation of these differences creates mutual dependencies individuals get used to regard themselves as part of a whole, the organ of an organism (Durkheim and Simpson, 1969). This definition of the essence of mechanical solidarity relates to the nature of relationships of the first adopters of rainforestation in the 1990s. After all, the pioneering adopters of rainforestation were mostly, if not all, farmers who may have similar dreams, priorities, and aspirations in life.

For this purpose, this study would revisit the pioneering rainforestation adopters in Sitio Cienda San Vicente, Barangay Gabas, Baybay City, Leyte and determine the reasons that have caused the pioneering adopters of rainforestation to succeed, investigate into the manifestations of Durkheim's notion of mechanical solidarity as discernible in the experiences of the pioneering rainforestation adopters, and evaluate whether or not the manifestations of the notion of mechanical solidarity have been a significant factor in the success of Rainforestation. This study hopes to arrive at a new knowledge on the realm of the study of Sociology as a discipline and the thrust to preserve and protect of what is left of the natural environment.

2 MATERIALS AND METHODS

Research Design

In the thrust to determine the reasons for the pioneering adopters success of rainforestation implementation in relation to Durkheim's notion of mechanical solidarity, this research makes use of the qualitative research method of hermeneutic phenomenology which is essentially characterized by Martin Heidegger's interpretative approach that focuses on researcher involvement through on-going interpretation (Thompson, 2007). Aside from that, this study would also employ the method of interpretative textual analysis to analyze literature relating to rainforestation and Durkheim's notion of mechanical solidarity. With this, this study follows Heidegger's contention that it is impossible to bracket researchers' assumptions and reflections from their research. Instead, in the hermeneutic approach, it is possible to bridle researcher assumptions through scrutinizing by continually questioning and critically reflecting upon one's pre understanding and involvement in the Phenomenon (Dahlberg, 2006). In one way or another, the focus is toward illuminating details and seemingly trivial aspects within experience that may be taken for granted in people's lives with a goal of creating meaning and achieving a sense of understanding (Wilson and Hutchinson, 1991).

Hermeneutic phenomenology also aims at producing rich textual descriptions of the experiencing of selected phenomena in the life world of individuals that are able to connect with the experiences of people collectively. From identification of the experience of phenomena, a deeper understanding of the meaning of that experience is sought (Smith and Vandenburg, 1997). Hence, in order to have a full understanding of what this study's respondents want to convey, the use of any language that the respondents are most comfortable with is utilized. According to Langdrige (2005), to understand the life world, people need to explore the stories that others tell of their experiences. It is then the researchers' task to come up with meaningful insights so that what the respondents are saying or expressing would be interpreted and deciphered properly to give justice to the realities that the respondents are trying to express or convey.

It is in this sense that the above-mentioned method would challenge the researcher to reflect deeply on what it is that the texts of the field have to say. After all, this research method's goal is to invite its readers to enter the world that the texts would disclose and open up in front of themselves (Kafle, 2011). Moreover, to supplement data from interviews, this study also employs the method of interpretative textual analysis and delve on the aspect that the written texts considered in this study would shed light to what this study tries to arrive at. With this at hand, this study could come with a wholistic picture on why rainforestation is construed as a feasible technology in the Filipinos' thrust to save Mother Nature and how Emile Durkheim's notion of mechanical solidarity have significantly contributed to the success of Rainforestation implementation for the past twenty plus years.

Research Procedure

In the process of identifying the successful individual adopters of rainforestation technology from the Visayas region in the Philippines, this study made use of available data from the Institute of Tropical Ecology and Environmental Management of Visayas State University in Baybay, Leyte, Philippines. Purposive sampling was utilized to narrow down the respondents into the pioneering Rainforestation adopters of the 1990s. Key informant interviews with open-ended questions relating to the lived experiences of the respondents were employed. In doing this, the researcher visited the respondents, the officers of the Cienda San Vicente Farmers Association, in Barangay Gabas, Baybay City and the people that were actively involved in the establishment of the pioneering adopters' rainforestation demonstration farms. In this study, the researcher interviewed eight respondents who had thorough knowledge of the nature of the CSVFA rainforestation demonstration farm. The researcher then set up individual interviews with each respondent in a manner that the respondent found most comfortable. The interviews were unstructured, casual, and conversational. Such conversational interviewing had generated a first person description of the experience (Van Manen, 1990) since the interviews had elicited a variety of types of rich data that manifested how the participants had interpreted and used language as well as how they explained their decisions or actions or narrative data (Cohen, et.al., 2000).

During the course of the interviews, the following questions were asked: 1) what were the reasons that caused the pioneering adopters of Rainforestation to succeed?; 2) Were there manifestations of Durkheim's notion of mechanical solidarity as discernible in the experiences of the pioneering Rainforestation adopters?; 3) Did the manifestations of the notion of mechanical solidarity a significant factor in the success of Rainforestation? The researcher gained permission to digitally record the interviews. Digital recording allowed the researcher to focus on the interviews, attend to the participants, record memos and accurately captured participants' tone, inflections, and pauses.

After the data were gathered from several sessions of key informant interviews, thematic analysis was done with the use of the hermeneutic circle of reading, interpretation, and reflective writing in order to identify phenomenological themes that were essential to represent the structure of experience. The process began with the immersion in the data through reading and re-reading in order to engage with the meaning of the texts for interpretation that facilitated coding (Van Manen, 1990). After the process of data interpretation, the researcher assessed the trustworthiness of the data analysis by presenting the study's interpretation to the respondents. As a qualitative method, this research embarked on several sessions of key informant interviews for clarification and validation of data. Hence, the final draft of this study was presented to the respondents for their appraisal. Lastly, to supplement the data derived from the several sessions of key informant interviews, textual analysis on literature related to the study was done.

3 RESULTS AND DISCUSSION

The Causes for Rainforestation Adoption and Implementation

The pioneering adopters had succeeded in their thrust to implement Rainforestation demonstration farms for a variety of reasons. The main reason for the pioneering Rainforestation Adopters' success was their commitment to protect of what is left of the natural environment around the adopters' area so that they could not be affected by the negative effects brought about by the gross exploitation of Mother Nature. Another reason for the success of Rainforestation implementation was that the pioneering adopters were motivated to gain economic benefits as an offshoot for their adoption of the Rainforestation technology. More than two decades after its implementation, Rainforestation had started to give the pioneering adopters the opportunity to enjoy the return of biodiversity in their respective areas that in turn translated to their enjoyment of economic benefits. There were three pioneering Rainforestation adopters in the Province of Leyte. First was the Cienda-San Vicente Farmers Association. Second was the Barangay Patag Rainforestation Organization, and the third adopter was Mr. Manuel Posas. At present, all three pioneering rainforestation adopters have experienced success in their efforts twenty years after implementation. But for the purpose of this study, this paper has only delved with the Cienda San Vicente Farmers Association (CSVFA).

The Cienda-San Vicente Farmers' Association was the first Rainforestation adopter in the Visayas. It was worth noting that in the 1990s, the forests around Cienda and San Vicente Villages had been subject to degradation from rampant illegal logging, wildlife poaching, and slash and burn agriculture. When the farmers' farms and fields started to become affected by the shortage of water during summer and flooding and sedimentation during the rainy season, some of the community members decided to form the Kilim Upland Farmers' Association (KUFA) for the purpose of guarding the well-being of their forests and protect the watershed area. This initiative was supported by the Integrated Social Forestry Program of the national government. However, when the project ended, the efforts of the group were not sustained and illegal logging in the watershed resumed (Bande, Consunji, Bloomfield, and Labastilla, 2016).

The success of the Cienda San Vicente Farmers' Association Rainforestation project could be attributed to the former KUFA members' initiative and efforts to approach the Rainforestation team from Visayas State University upon hearing that the university, through its community advocacy, had been disseminating the Rainforestation program, a reforestation strategy to reforest denuded lands with the use of Philippine native tree species. Sensing that VSU's initiative was very much aligned with their mission to protect and restore their forests, some of the KUFA members expressed their interest to take part in the VSU

Rainforestation project. VSU conducted an initial Rainforestation training for 67 members of the Cienda and San Vicente villages. Only 27 individuals decided to pursue with the project at that point. To facilitate the establishment of a pilot Rainforestation site in Cienda, VSU assigned a community organizer, Dr. Marlito Bande, to the village. Dr. Bande decided to live with the community and conducted regular discussions and consultations to build consensus on key issues, strategized a plan of action, and mobilized the members based on increased awareness and commitment (Bande, Consunji, Bloomfield, and Labastilla, 2016).

Dr. Bande assisted in restructuring the group and registering them as a people's organization with the Department of Labor and Employment under the new name, Cienda San Vicente Farmers' Association (CSVFA). In order to stop the destructive logging and slash and burn practices, the members trained to be deputized forests wardens, giving them the right to apprehend violators in their watershed areas. The organization came up with their organizational structures and constitution and by-laws. They also came up with the outline of different environmental activities and cost-benefit scheme. CSVFA then signed a Memorandum of Agreement (MOA) with VSU, the local government unit, and the owner of the land where the Rainforestation farm was developed. The MOA legalized the lease of the land to CSVFA for 50 years, formalized the partnership among the different stake holders, and specified the roles and responsibilities of each stake holder (Bande, Consunji, Bloomfield, and Labastilla, 2016). With this, the CSVFA Rainforestation farm was established, and at present, is still existing and standing proud at Sitio Cienda and San Vicente, Gabas, Baybay City, Leyte.

According to Dr. Marlito Bande, the community organizer assigned to the CSVFA area during the early stage of Rainforestation implementation:

The success of the CSVFA Rainforestation farm is a result of a collaborative effort among the farmers themselves. It was really the farmers who initiative the move since they were the ones who were affected by the negative effects brought about by environment degradation. When I was assigned to work with the farmers, I saw their sincerity and commitment so I decided to live with the community in order to help them achieve their goal to protect their forest and at the same time teach them to establish a Rainforestation demonstration farm by teaching them the basics like the collection of wildlings from the forest, the establishment of a nursery, the identification of a potential Rainforestation site, and the planting of native tree seedlings. In fact, during the early years, I also helped the farmers in negotiating for the use of the lot for the demonstration farm. All in all, I can say that the success of the CSVFA Rainforestation efforts is brought about by the collaborative efforts of the farmers themselves (Bande, 2017).

Engr. Jimmy Pugosa, an instructor at the Institute of the Tropical Ecology and Environment also adds:

When I was younger, I already helped my parents in implementing the Rainforestation farm at Cienda San Vicente area. My parents are active members of the farmers' association until the present. I can really say that the success of the Rainforestation farm is wholly a result of the farmers' collaborative effort. Yet, I will also add that commitment to Rainforestation and nature conservation is also a significant driving force why the association is still active until the present and the Rainforestation farms survived for the past twenty plus years (Pugosa, 2017).

As discernible in Dr. Bande and Engr. Pugosa's narrations, the people's attitude to work together and collaborate lead to the success of the establishment of the pioneering rainforestation demonstration farm. This success is manifested in the adopters' perception that after the forest has been restored, there is noticeable return of biodiversity in the area. The river, for instance is again teeming with fresh water fish which enables the residents to catch fish for their consumption. The water in the river is no longer problematic even during the dry season and that birds are again coming back to the area. Moreover, the area around the rainforestation site has also become conducive to farming. It becomes conducive in the sense that water in the river has become available all year round. Another economic benefit that the adopters have reaped because of the restoration of their water source is the availability of their river for local aquaculture. According to Compendio and Bande (2017), the adopters have also been able to raise tilapia in their rivers because there is already a greater chance of fish survival because of the clean water that comes as a result of the adopters' forest restoration efforts.

Aside from farming, the success of the establishment of their Rainforestation farm is also noticeable in the economic benefits that the adopters are presently reaping. The seedlings from the trees have given the adopters extra income because they have just recently been contracted by the Department of Environment and Natural Resources (DENR) to supply seedlings of native trees which give them hundreds of thousands worth of income. This is not to mention the frequent visits of foreign students and researchers who pay little amounts of environmental fees and donations to the adopters. But before the CSVFA has gotten the contract from DENR National Greening Program (NGP), the adopters have also acquired a contract with Del Monte Philippines in Bukidnon in which they have also supplied the company with native tree seedlings that have also enabled them to collect payments by the thousands (Verlarde, et. al., 2007).

Manifestations of Durkheim's notion of mechanical solidarity as discernible in the experiences of the pioneering Rainforestation adopters

From the very start, Durkheim's notion of mechanical solidarity is very much present in the reason why the former Kilim Upland Famers' Association (KUFA) has decided to organize themselves for the common reason that they want to protect their forests and watershed from illegal loggers, wildlife poachers,

and slash and burn farmers. Since mechanical solidarity is defined as a form of social cohesion that is based on the similarity of members (Robertson, 1989), Durkheim's mechanical solidarity is very discernible in the bond of farmers who simply want to protect of what is left of the natural environment around them. When the farmers have sensed that their farming activity have already been threatened by the effects of environmental degradation through dwindling water supply during the dry season and sedimentation and floods during the wet season, they immediately form themselves into a body in order to protect their forests and watersheds.

The farmers' action to form an organization to check the abuses on the environment is a manifestation of Durkheim's collective consciousness. The farmers themselves have sentiments and beliefs held in common which is a characteristic of collective consciousness. In this case, the farmers believe that when they take good care of the natural environment, the environment would also be favourable to them. Hence, if someone mess up with the environment, the farmers' felt that it would be their moral duty to protect Mother Nature. This relates well to Durkheim's notion of collective consciousness since collective consciousness keeps the society together. The criminal act does not shock the common consciousness because it is criminal but it becomes criminal when it offends the collective consciousness (Mondal, <http://www.yourarticlelibrary.com/sociology>). This is manifested with the way the farmers react to environmental abuse because they see it as offending their common consciousness as farmers and as tillers of the land. Hence, Durkheim's notion of collective consciousness is discernible in the farmers' act of organizing themselves since they view the environmental abuses surrounding them as offending their consciousness as famers.

Moreover, the different environmental activities of CSVFA also manifest Durkheim's notion of mechanical solidarity in such a way that the farmers manifest signs of understanding that the collective personality is only one, and therefore, property itself is inevitably collective. Property can only become private property when the individual frees himself from the mass and becomes a personal, distinctive being as in the case in the organic societies (Mondal, 2017). Yet, the farmer members of CSVFA functions as one body in their thrust to conserve nature and establish their Rainforestation farm. According to Dr. Marlito Bande:

The farmer members of CSVFA possess a profound awareness and commitment for forest restoration. With this, they develop and enrich the culture of volunteerism in the establishment, maintenance and monitoring of RF farm. With this, everybody works for the well being of the Rainforestation farm since everybody possesses it. The organization itself is a semblance of oneness because of the similarities that they share – that they are farmers and they are dependent on what Mother Nature would give them. To govern the organization, the farmers have also established a Board of Directors in which the Directors or their leaders are also trusted by the members since the members view their leaders as possessing the ability

to be democratic and transparent where all decisions have been discussed and presented to the general assembly for their approval. The farmers have also utilized local or indigenous knowledge from older and more-experienced members of the organization in relation to forest restoration (Bande, 2017).

Hence, as far as the existence of the CSVFA is concerned, Durkheim's notion of mechanical solidarity is very much discernible in the sense that the individual is sole subordinate to his group or society. Community resources are owned collectively by the community, and as far as Rainforestation is concerned, ownership is not personal since everybody is contributing for its establishment, and hence, everybody owns it. It is therefore a semblance of the existence of a collective property which is one of the elements of Durkheim's mechanical solidarity.

Moreover, Bernie Tabaranza, an employee of the Institute of Tropical Ecology and Environmental Management and a son of one of the pioneering members of the Cienda San Vicente Farmers Association (CSVFA) has also stressed that Rainforestation has succeeded in Cienda since the organization's adoption of the Rainforestation is not only about the community, it is also about family involvement. According to Bernie:

Household forms of membership by Rainforestation adopters ensures social sustainability since children are involved in the planning and are assigned task in taking good care of the existing Rainforestation demonstration farm. With this, the children are given the opportunities to feel that they also possess the Rainforestation farm since they also have invested their time and efforts in taking care of it. Family members involve in CSVFA are also actively involved in the implementation, and monitoring of forest restoration activities (B. Tabaranza, 2017).

Moreover, Bernie's observation is reinforced by the observation of his uncle, Florencio Tabaranza, who is one of the pioneering members of CSVFA. He is also the current vice president of the association and serves as one of the organization's Board of Directors. Manong Florencio has also stressed that the members of CSVFA were active since the time of its implementation in the mid 1990s since the aim of the farmers was solely to protect the remaining forest in the area so that they could continue to farm and make ends meet at the end of the day. With this, they could sustain the needs of their individual families for a longer period of time. For Manong Florencio, their farmer organization had never been inactive whether there were funding or not from external sources since their primary goal was to protect their well being as farmers by also protecting the environment from the very start. One of the ways of doing such was the establishment of the Rainforestation farm which had also been taken cared of by the children of the CSVFA members. For Manong Florencio Tabaranza :

The Utilization of labor inputs as individual capital build-up had greatly contributed to the farmers' sense of ownership of the Rainforestation farm. Since all of us were farmers and funds were scarce among us, we

instituted a strategy called "tagbo" or "pintakasi" in which our efforts and labors in the establishment and maintaining of the Rainforestation farm were quantified and given monetary value. This in turn was given value as a members' investment depending on the number of labor hours that a particular member has dedicated to the well being of the Rainforestation farm. The more time one allots to the establishment and caring for the farm like pruning, brushing of weeds and other related activities, the more capital a member has contributed to the group. At present, we are already reaping the fruits of our labors since it slowly becomes an eco-tourism and research site. With visitors coming, many of them also give fees which serve as an income of the organization. Not only that, with the coming of the National Greening Program (NGP) of the national government, the organization has also been contracted to produce seedlings of native trees which give the organization not only thousands in income but millions. The dividends were given to the members based on the capital that they had invested years back (F. Tabaranza, 2017).

Manong Florencio Tabaranza's observation echoes the fact that the operations of the CSVFA are clear manifestations of Durkheim's notion of mechanical solidarity. This manifestation is in a way, semblance of Durkheim's assertion that mechanical solidarity is necessary. This is somehow similar to Durkheim's contention that intermediary occupational groups and associations are settings to help fill the gap between the individual and the state. Organization members' formed attitudes and actions are the primary place in which members of an occupational group can create shared moral system of rules (Hirsch, Fiss, and Green, 2009). Hence, the feeling of the pioneering adopters to seriously adopt Rainforestation for their future's well-being somehow manifest the development of shared moral system of rules which is very Durkheimian in nature.

Manifestations of the notion of mechanical solidarity a significant factor in the success of Rainforestation

The operations of the Durkheimian's notion of mechanical solidarity is a significant factor in the success of the Rainforestation farm in Sitio Cienda San Vicente since the pioneering adopters have developed a sense of oneness and form an organization to check people who have been involved in illegal logging, wild life poaching, and slash and burn farming. This is very Durkheimian in the sense that mechanical solidarity is defined as a form of social cohesion that is based on the similarity of members (Robertson, 1989). In the case of these pioneering adopters, their similarity is their being farmers and the cause of their evident social cohesion is discernible in their collective intention to protect the forest around them so that they would not run short of water during the dry season and not be so much affected by flooding in the wet season and in the long run, could farm for the greater part of the year. Dr. Bande, the pioneer community organizer of this association has observed that the adopters' have been very sincere in their goal to protect the environment in

such a way that he has decided to live with the community and journey with them in their thrust of protect the environment around them according to their capacity as farmers. As Dr. Bande recalls:

During the implementation of the first Rainforestation farm in the country, I had decided to live with the people and journey with them as they tried to protect of what was left of the natural environment in their area as well as the establishment of a Rainforestation farm as a strategy for nature conservation. I had witnessed what these people had gone through the years and their efforts had produced wonders since they had successfully and collectively defended their right for a clean and safe environment as well as the establishment of a Rainforestation farm to bring back ecosystem functions. Now, they are already enjoying the fruits of their labors which could have not been made possible without the collective effort of the farmers through ups and downs (Bande, 2017).

Moreover, mechanical solidarity is also construed as a significant factor in the sense that it is conceived to work in smaller, pre-industrialized and/or un-industrialized societies. Mechanical solidarity is based on people's similarities which is very applicable to the CSVFA which originally started with the commitment of 27 farmers whose occupations are similar and whose motivations in protecting the environment for their well being are also the same. Furthermore, the presence of the culture of volunteerism in the establishment, maintenance and monitoring of RF farm, the awareness and commitment of the members in forest restoration, the ability of its leaders (Board of Directors) to be democratic and transparent where all decisions should be discussed and presented to the general assembly for final approval, the household form of membership by RF, and the utilization of labor inputs as individual capital build-up and basis for the benefit-sharing scheme of income derived from forest restoration activities are all made possible because the farmer members of the CSVFA somehow view the establishment of the Rainforestation demonstration farm as belonging to the whole community in such a way that it is construed that community resources are collectively owned by the community itself. There is no personal property in relation to their notion of ownership to the Rainforestation demonstration farm and that there is only the existence of only collective property which is very Durkheimian in nature, specifically, mechanical solidarity. This study views this as a significant factor in the establishment and success of the CSVFA Rainforestation farm.

4 CONCLUSION

The success of the pioneering Rainforestation demonstration farm of the Cienda San Vicente is inspired by the adopters' collective drive to protect of what is left of the natural environment. This manifests Durkheim's notion of mechanical solidarity since it shows a sense of a form of social cohesion that is based

on the similarity of members. This Durkheimian element is construed to be a factor in the success of the CSVFA Rainforestation farm since it has driven members to push for their right for a clean and safe environment for the sake of their survival as a community of people who are so much dependent on farming. Moreover, Rainforestation, as a strategy in nature conservation has also benefited from this since people's collective drive to conserve nature has also resulted to the community members' thrust to establish and take care of their Rainforestation farm.

Moreover, this study concludes that the success of CSVFA Rainforestation is also attributable to the nature of their society which is somewhat pre-industrialized and small – a clear manifestation of Durkheim's mechanical solidarity. Mechanical solidarity is based on people's similarities which is very applicable to the CSVFA which has originally started with the commitment of 27 farmers whose occupations are similar and whose motivations in protecting the environment for their wellbeing are also the same.

Lastly, the very notion that there is no personal property in relation to their notion of ownership to the Rainforestation demonstration farm and that there is only the existence of only collective property drives people to care for it and work for the sake of its well-being since the benefits of the success of the Rainforestation farm also benefits each and every member of the group – a manifestation of mechanical solidarity.

RECOMMENDATIONS

This study recommends that a thorough study of the effects of rainforestation would be conducted with respondents comprising of the new adopters in the different parts of the Philippines. With this study, the capacity of rainforestation as a reforestation method that paves the way for biodiversity restoration, nature conservation, and a sustainable form of reforestation initiative could be determined and validated.

Lastly, this study also recommends that a similar research has to be made with the individual rainforestation adopters as respondents. The causes for adoption of rainforestation, the challenges that said adopters met in the establishment of their rainforestation farms, as well as said adopters' driving forces of success would be very much different from the experiences of the pioneering group rainforestation adopters.

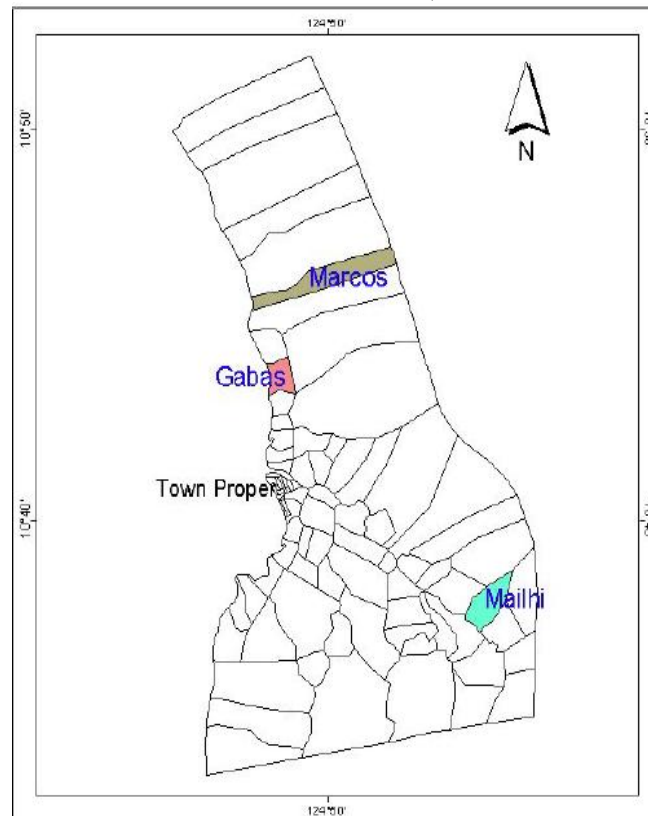
REFERENCES

- Avila, B. (2013, November 9). Ruping Prepared us for Typhoon Yolanda. Retrieved July 23, 2018, from <https://www.philstar.com/opinion/2013/11/09/1254625/ruping-prepared-us-typhoon-yolanda>
- Bande, M., Consunji, H., Bloomfield, G., and Labastilla, P. (2016). Rainforestation Case Study: The Cienda San Vicente Farmers' Association

- Experience. CT and Panama City, USA and Panama: Yale University and Smithsonian Topical Research Institute.
- Compendio, S. M., and Bande, M. M. (2017). Effectiveness of Community-based Forest Management Program as a Strategy on Forest Restoration in Cienda and San-Vicente, Baybay City, Leyte, Philippines. *Asian Journal of Agricultural Extension, Economics and Sociology*, 15(4), 1-20.
- Durkheim, E. (1969). *The Division of Labor in the Society* (G. Simpson, Trans.). New York, USA: Free Press.
- Fernando, E. (2005). Restoring the Philippine Rainforests. In Haribon Policy Paper No. 2. Manila, Philippines: Haribon Foundation.
- Francisco, K. (2016, November 6). The 1991 Flash Flood that Devastated Ormoc. Retrieved July 23, 2018, from <https://www.rappler.com/newsbreak/flashback/151178-look-back-1991-flash-flood-ormoc>
- Goltenboth, F., and Tropentag. (2005). Conference on International Agricultural Research for Development. Germany: Stuttgart-Hohenheim. Retrieved August 2, 2017, from http://www.rainforestation.ph/Resources/pdf/publications/Goltenboth_2005_Ecosystem_Approach.pdf
- Haribon Foundation. (2005). Rainforestation: A Strategy for Restoring Our Dying Forests. In Haribon Policy Paper no. 3. Manila, Philippines: Haribon Foundation.
- Haribon Foundation. (2016). Classifying Natural and Restored Forests Containing Primary, Secondary Growth, or Residual Forests. PANAOL Rain Forest Restoration Initiative, 3.
- Hirsch, P., Fiss, P., and Green, A. (2009) *A Durkheimian Approach to Globalization*. Oxford, UK: Oxford Handbook of Sociology and Organization Studies, Oxford University Press.
- Kafle, N. (2011). Hermeneutic Phenomenological Research Method Simplified. *Bodhi: An Interdisciplinary Journal*, 181-200.
- Kalikasan People's Network. (2011, November 5). Where are the Trees? Examining the State of the Philippine Philippine Forests. Retrieved August 2, 2017, from <http://www.kalikasan.net/features/2011/06/05/where-are-the-trees-examining-state-philippine-forests>
- Langdridge, P. (2005). *Phenomenological Psychology: Theory, Research, and Methods*. London: Pearson.
- Milan, P., and Ceniza, J. (Eds.). (2009). *Rainforestation Trainers Manual*. Baybay City, Philippines: Institute of Tropical Ecology.
- Mondal, P. (2017, November 26). Theory of Mechanical-Organic Solidarity: A Shift Towards Modern Society. Retrieved July 23, 2018, from <http://www.yourarticlelibrary.com/sociology/theory-of-mechanical-organic-solidarity-a-shift-towards-modern-society/39854>
- Robertson, I. (1989). *Society: A Brief Introduction*. Worth Publisher.
- Ranada, P. (2014, February 21). Is the Government Reforestation Program Planting the Right Trees? Retrieved August 2, 2017, from <http://www.rappler.com/nation/51200-national-greening-program-native-trees>. Accessed: 2 August 2017.
- Schiermer, B. (2014). Durkheim's Concept of Mechanical Solidarity – Where Did It Go? *Durkheimian Studies*, 20, 64-88.
- Smith, S. J. (1997). Phenomenology of Educating Physically. In D. Vandenburg (Ed.), *Phenomenology and Educational Discourse* (pp. 119-144). Durban: Heinemann.
- Schneider, T., Ashton, M., Milan, P., and Montagnini, F. (2013). Growth performance of sixty tree species in smallholder reforestation trials on Leyte, Philippines. *New Forests*, 45(1), 83-96.
- Velarde, G. M., Gravoso, R. S., Cagasan, E. G., and Gabrillo, C. A. (2007). Most Significant Changes Experienced by Farmers from Adopting Rainforestation Farming. *Annals of Tropical Research*, 29(3), 109-122.
- Wilson, H., and Hutchinson, S. (1991). Triangulation of Qualitative Methods: Heideggerian Hermeneutics and Grounded Theory. *Qualitative Health Research*, 1, 263-276.

APPENDIX 1

Map of Baybay City, Leyte Showing Barangay Gabas where Sitio Cienda is Located (Velarde, Gravoso, Cagasan and Gabrillo, 2007)



Barangay Map of Baybay, Leyte

APPENDIX 2

Map of Sitio Cienda and San Vicente in Barangay Gabas, Baybay City, Leyte (Compendio and Bande, 2017)

