







TABLE II  
ASSET CAPITALS FOR SELECTED COASTAL VILLAGES, SORSOGON,  
PHILIPPINES

Village	Natural	Social	Financial	Human	Physical	Mean
Gimagaan	0.73	0.80	0.31	0.40	0.60	0.57
Sevilla	0.64	0.80	0.24	0.39	0.59	0.53
Saclayan	0.57	0.80	0.14	0.36	0.28	0.43
Sogoy	0.61	0.80	0.29	0.44	0.61	0.55
Milagrosa	0.68	0.80	0.25	0.44	0.62	0.56

By thematic area, the four villages except for Saclayan have comparatively the same score in terms of its capability

TABLE III  
COMPARATIVE RATING ON SUSTAINABILITY INDICATORS FOR SELECTED COASTAL BARANGAYS, SORSOGON, PHILIPPINES

Themes	Sustainability Indicators	% Weight	Gimagaan	Sevilla	Saclayan	Sogoy	Milagrosa
Introduction of sustainable Management Systems of Natural Resources	Usage of Organic Inputs in production	10.00%	2	2	2	2	3
	Cropping Diversity	10.00%	2	3	2	3	3
	Livelihood Mix	10.00%	3	3	2	3	3
	Agricultural Production	10.00%	3	3	3	3	2
	<b>Sub-total</b>		<b>10</b>	<b>11</b>	<b>9</b>	<b>11</b>	<b>11</b>
Strengthening of Community Resiliency	Exposure of farm and the community to climate-related risks	10.00%	3	2	2	2	3
	Incidence of Crop Failure	10.00%	3	2	2	2	3
	Usage of inorganic inputs in production	10.00%	2	1	1	1	2
	<b>Sub-total</b>		<b>8</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>8</b>
Increasing capacities for social development enterprises	Access to buyers	4.29%	4	3	3	4	4
	Access of Community to technological support	4.29%	2	2	2	3	3
	Access to financial capital	4.29%	3	2	2	4	4
	Access to transport	4.29%	4	2	3	3	3
	Access to land	4.29%	3	3	2	3	3
	Presence of local support institution to facilitate access to livelihood assets	4.29%	3	3	2	3	3
	Degree of participation of women on livelihood efforts	4.29%	2	3	3	3	3
	<b>Sub-total</b>		<b>21</b>	<b>18</b>	<b>17</b>	<b>23</b>	<b>23</b>
	<b>GRAND TOTAL</b>		<b>39</b>	<b>34</b>	<b>31</b>	<b>39</b>	<b>42</b>

#### IV. CONCLUSIONS

Based on the field results and secondary data gathered, it revealed that majority of the village residents belong to the middle and poor social class. Some residents are already practicing organic farming in their backyard vegetable production through the use of decomposed organic material.

Gimagaan village has the greatest access to asset capital. It has transformed its community from a once laidback village to a tourist attraction to foreigners because of the presence of its pristine resorts. Likewise, it continuously build its community as evidenced by the presence of additional structures and amenities and the residents weave the future characterized by the virtues of religiosity, courtesy, friendliness and hospitality. This village is also highly accessible and can be easily reached using public utility vehicle such as tricycle and motorbike. Marketing of farm products is easy for producers and buyers can get hold of these products without much difficulty compared to other villages in Sorsogon. Some residents are already practicing organic farming in their backyard through the use of dried organic materials such as 'dayami' hence, they seldom use fertilizer for their vegetables. Majority however, are still

to introduce sustainable management systems for its natural resources. Gimagaan and Milagrosa are highly resilient villages compared to Sevilla, Saclayan and Sogoy. The ability to increase capacities for social development enterprises was generally high for Milagrosa, Sogoy and Gimagaan villages but lowest for Saclayan village. Over-all, results showed that Milagrosa village had the highest sustainability score (42) and Saclayan village had the lowest score (31).

using the 50-50 ratio for organic-commercial fertilizer application in their farms.

Saclayan on the other hand, has the least access to asset capital. The major source of income of the residents is seaweed farming/culturing and fishing. The village is rural in nature, far from the central district of Sorsogon with only a handful of institutions extending assistance to them. Agricultural/farm crops are unfavorably affected by extreme weather condition or intense heat. This is the basic complain of the residents especially because farmlands are rained. To a large extent, these undesirable weather conditions do not only directly affect the small crops but the forest, the sea and the mangrove areas as well. There are decreasing number of mangrove areas which adversely affect the habitat of mangroves, fish and marine resources. The produce of coconut farms is also affected when there is El Niño and food reserve of the community significantly decreases. Likewise, the current situation is that the village is accessible by sea transport. An alternative transport system by land that can connect the village to other nearby towns is critical to increase its accessibility to livelihood assets.

The village of Milagrosa showed the highest score in terms of assessing the sustainability of the area. Milagrosa is more capable of sustaining management systems of its

natural resources, highly resilient against perturbations and had greater chances of improving capacities for social development enterprises. Both Gimagaan and Sogoy villages ranked second followed by Sevilla and Saclayan which ranked third and fourth, respectively as shown by their sustainability indices.

Over-all, Sogoy and Sevilla villages showed moderate access to asset capitals and their sustainability index also indicate that they are moderately sustainable. These villages experience severe flooding when there are typhoons which adversely affect their crops and farms. Likewise, intense heat or El Niño resulting to drought is also being experienced. These unprecedented environmental disasters do not happen yearly but when it comes, severe chaos and malady are being experienced by the residents such as illnesses, lack of food and water and destruction of their houses. However, despite these calamities, village residents are able to cope because of the 'bayanihan' spirit and oneness. Just like in other villages in Sorsogon, some residents (20%) still rely on the use of inorganic fertilizers and traditional farming with the use of synthetic fertilizer is also observed. However, majority of the households are already adopting the use of organic fertilizer

## V. RECOMMENDATIONS

The barangay residents will benefit much if they will have more produce out of coconut and rice farming. Relative to this, technologies may be introduced and taught which do not require intensive capital to farmers.

Alternative production technology which is not cost intensive can be explored. The residents must fully understand that the focus of organic farming is to provide them an alternative livelihood source which is eco-friendly and will promote environmental integrity. Adoption of organic rice farming in the rice fields of the barangay, which is only limited in area, can be tested using local materials such as decomposed rice straw and animal manure (hogs and ruminants). The current practice of 50-50 ratio for organic-commercial fertilizer application in their farms can be a good start towards organic farming.

The agricultural farms in the barangay showed indications of being a potential area for native beekeeping project/apiary establishment *Apis Cerana*- "ligwan" and *Trigona Biroi* which is locally known as "kalulot" or "lukot". In the coconut production area, particularly in less-dense planted farms, crop-diversification approach by integrating perennial crops, can still be advocated for adoption. Provision of perennial crops produced either through a collective nursery production project of fruit-bearing trees of the community or directly provided by a project to the farmers, will be helpful to facilitate its adoption. Training of farmers on plant nursery development the establishment in their own farms or individual backyard will be another development option to the project towards a more sustainable production of planting materials by the respective recipients. Through this approach, farming families will be more empowered to collect seeds of trees based on their preference in terms of

characteristics, adaptability in their farms and market potentials. There is also a need to strengthen the production-market linkage which is vital to the success of the transition from their traditional farming to organic-based farming. There is a need for the establishment of demonstration farm on organic agriculture. While some residents strongly advocate the use of organic fertilizers, it is important for them to actually see that an organic-based farm is feasible and will be able to provide the food requirement of the community in general and of each family in particular. A more comprehensive feasibility study of fishery-based livelihood project must be done. If families will have complete fishing resource materials, they will be assured of a more stable livelihood through-out the year that is more environment- friendly and sustainable. An example of integrated fishing resources are for seaweed production, crab harvesting cages, simple fishing gears, etc. To support the sustainability of fishery-based livelihood projects, planting of mangrove and establishment of community-based sanctuaries in partnership with the LGU, DENR and SA-BFAR must be encouraged.

## ACKNOWLEDGMENT

The researchers wish to acknowledge the funding support given by Intervida Foundation, Philippines for this project. Likewise, we are grateful for the administrative support of the key officials of the Central Bicol State University of Agriculture in the implementation of this project.

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