ACADEMIC REVIEW OF HUMANITIES AND SOCIAL SCIENCES
Vol.: 4 Issue: 1 Year: 2021, pp. 116-134

ARHUSS
ISSN: 2636-7645

MANAGEMENT PRACTICES OF BIDANI-ASSISTED NUTRIPAK PRODUCERS ASSOCIATIONS IN SELECTED MUNICIPALITIES IN LEYTE AND SOUTHERN LEYTE, PHILIPPINES

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Received Date (Başvuru Tarihi): 19/11/2020

Accepted Date (Kabul Tarihi): 18/02/2021

Published Date (Yayın Tarihi): 20/06/2021

ABSTRACT

Studies on knowledge, attitudes and practices are important to help the organizations assess their current situation and improve future operations. This study was conducted to determine the level of management practices adopted by the BIDANI-Assisted Nutripak Producers Associations in selected municipalities in Leyte and Southern Leyte as influenced by the members' management knowledge and attitude. Primary data on the respondents' socio-demographic characteristics, management knowledge, attitudes and practices were gathered through personal interviews with 67 respondents from the four associations using a self-made questionnaire. Data on the associations' profile were gathered from the documents available in the associations' files, and through key informant interviews with association officers. Data were analyzed using descriptive (totals, means and percentages), while relationships among variables were determined using the Chi-Square Test and Spearman's rank order correlation.

Results showed that the respondent's level of management knowledge and practice ranged from moderate to high, while their attitude ranged from positive to very positive. Analysis of the relationships among variables showed that the respondents' association had a highly significant relationship with knowledge (χ^2 = 19.830; p = 0.003) and practice (χ^2=19.112; p = 0.004), age had a significant and positive relationship with knowledge (r=0.254; p < 0.01), while number of children had a highly significant but negative relationship with knowledge (r = 0.363; p < 0.01). On the other hand, knowledge had a significant but negative correlation with practice (r= -0.310; p<0.05), while attitude had a highly significant positive relationship with practice (r = 0.477, p<0.01).

Keywords

Women's associations, Nutripak production, management practices

FİLİPİNLER, FİLİPİNLER, LEYTE VE GÜNEY LEYTE'DEKİ SEÇİLMİŞ BELEDİYELERDE BIDANI DESTEKLİ NUTRİPAK ÜRETİCİ BİRLİKLERİNİN YÖNETİM UYGULAMALARI

ÖZ

Bilgi, tutum ve uygulamalarla ilgili çalışmalar, kuruluşların mevcut durumlarını değerlendirmelerine ve gelecekteki operasyonlarını iyileştirmelerine yardımcı olmak için önemlidir. Bu çalışma, üyelerin yönetim bilgisi ve tutumundan etkilenen Leyte ve Güney Leyte'deki seçilmiş belediyelerdeki BIDANI Destekli Nutripak Üretici Dernekleri tarafından benimsenen yönetim uygulamaları düzeyini belirlemek için yapılmıştır. Katılımcıların sosyo-demografik özellikleri, yönetim bilgisi, tutumları ve uygulamalarına ilişkin birincil veriler, kendi kendine anket kullanılarak dört dernekten 67 katılımcı ile kişisel görüşmeler yoluyla toplandı. Derneklerin profiline ilişkin veriler, dernek dosyalarında bulunan belgelerden ve dernek yetkilileriyle önemli muhbir görüşmelerinden toplandı. Veriler tanımlayıcı (toplamlar, ortalamalar ve yüzdeler) kullanılarak analiz edilirken, değişkenler arasındaki ilişkiler Ki-Kare Testi ve Spearman'ın sıra sıralaması korelasyonu kullanılarak belirlendi.

Sonuçlar, katılımcının yönetim bilgisi ve uygulama düzeyinin orta ile yüksek arasında değişirken, tutumlarının olumlu ile çok olumlu arasında değiştiğini göstermiştir. Değişkenler arasındaki ilişkilerin analizi, katılımcıların ilişkisinin bilgi ($\chi2$ = 19.830; p = 0.003) ve uygulama ($\chi2$ = 19.112; p = 0.004) ile oldukça anlamlı bir ilişkiye sahip olduğunu, yaşın bilgi ile anlamlı ve pozitif bir ilişkisi olduğunu (r = 0,254; p <0,01), çocuk sayısının bilgi ile oldukça anlamlı ancak olumsuz bir ilişkisi vardır (r = 0,363; p <0,01). Öte yandan, bilginin uygulama ile anlamlı fakat negatif bir korelasyonu varken (r = -0.310; p <0.05), tutumun uygulama ile oldukça anlamlı pozitif bir ilişkisi (r = 0.477, p <0.01) bulunmuştur.

Anahtar Kelimeler

Kadın dernekleri, Nutripak üretimi, yönetim uygulamala

Citation: Cagasan, C. U. G. & Amestoso, N. T.(2021), Management Practices Of Bidani-Assisted Nutripak Producers Associations in Selected Municipalities in Leyte And Southern Leyte, Philippines, ARHUSS, (2021), 4(1): 116-134.

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1. INTRODUCTION

In areas where poverty incidence is high and in those hard-hit by calamities, livelihood projects have long been recognized as a vehicle for people to earn their living and secure their basic needs. These livelihood activities, in general, have been identified as means to help address the problem of poverty in the rural villages (DFID, 2002). Throughout the Philippines and over the years, livelihood projects have been conducted by associations and cooperatives with both government and non-government agencies providing assistance in the conceptualization and implementation of these livelihood programs.

The Barangay Integrated Development Approach for Nutrition Improvement (BIDANI) is a community-based participatory development approach which envisions "to improve nutrition and general well-being of the poor through more effective organizations of the barangay/municipality/city structure and improved capacities of local government in planning and management of program/project activities (PPAs) aimed at poverty alleviation and meeting the basic needs of the populace" (Cruz, 2014). BIDANI promotes socio-economic development through a process of participative planning and appraisal of activities, facilitated by academic institutions of higher learning through their extension programs and implemented by the village people in partnership with government and non-government agencies/organizations with the end goal of poverty alleviation, along with good governance, food security and nutrition improvement.

To attain its vision and achieve its mission and goals, BIDANI provided opportunities for people participation in assessing their problems and situations; in planning, implementing, monitoring, and evaluating program/ projects/activities (PPAs); and in uplifting the general welfare of people through trainings on specific skills, both technical and social.

Since its inception in 1978, BIDANI has assisted five (5) Nutripak processing associations in Leyte. As of 2017, only three of these associations are still active, one stopped its processing operations, while the other one is experiencing management problems. The decreasing number of active Nutripak processing associations and the inability of those which are still operating to grow in terms of production volume and number of members necessitate an evaluation of how well the officers and members of

these associations have learned and practiced basic management discipline needed for survival and growth.

This study is unique compared to other researches focusing on identifying the factors that affects organizational performance because most research studies on widely known organizations or people such as farmers (Mateo et al., 2021; Chuang et al., 2020; Mainack Dione et al., 2020), medical organizations (Palati et al., 2020; Hamed et al., 2020; Bepari et al., 2019), and business organizations (Bas et al., 2006; Egbu et al., 2005; Kourilsky et al., 2004). There has no enough studies published today about small scale women's organizations. And no study has been conducted yet to evaluate the performance of these BIDANI-Assisted associations, an all women organization in Leyte.

This study was conducted to assist the BIDANI management in identifying gaps in the delivery of the needed technical assistance to improve both management practices and business performance making the associations truly instruments to help solve poverty.

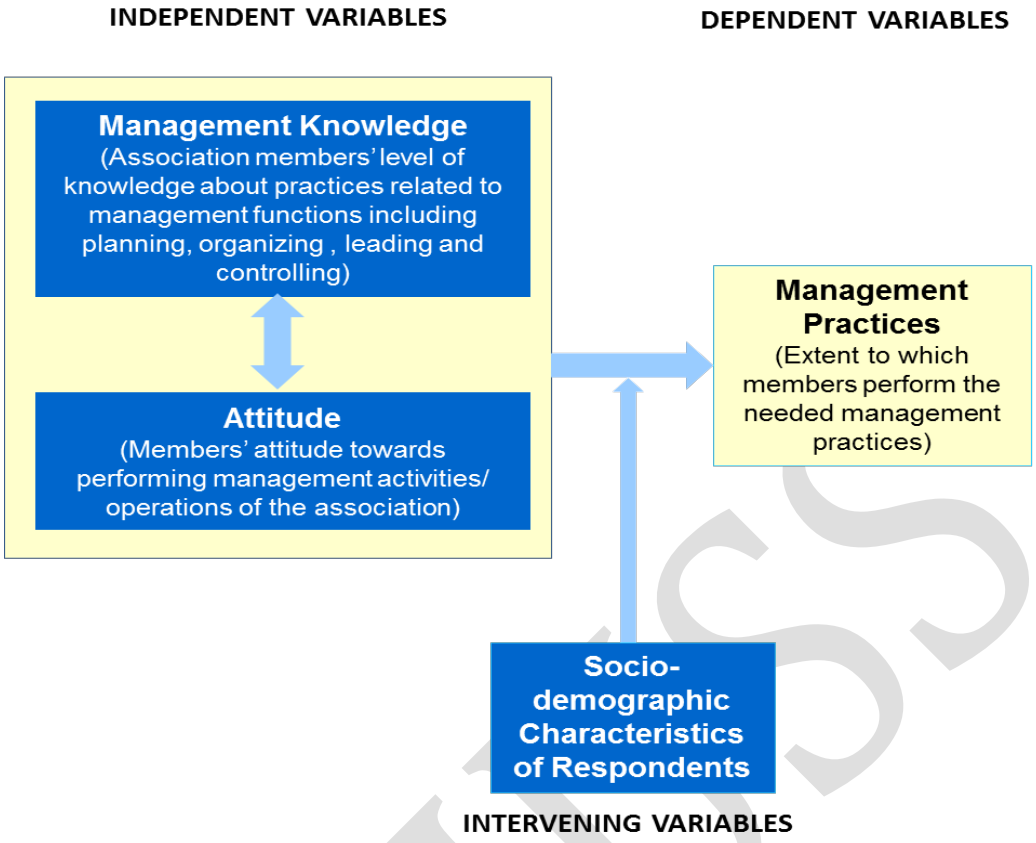
2. MATERIALS AND METHODS

2.1. Theoretical framework

This study was conducted based on the knowledge-attitude-practice model (Schwartz, 1976) which was also based on the cognitive-affective-behavior theory in social psychology. This study conceptualized that the knowledge about management introduced to the officers and members of the associations and their attitude towards such knowledge would be related to their actual management practices (Figure 1). Knowledge and attitudes were considered as the independent variables, while actual management practices were treated as the dependent variables.

It was also assumed that the respondents' socio-demographic characteristics including age, educational attainment, civil status, organizational affiliation, and attendance to trainings may influence the association members' knowledge acquisition and attitude formation. Thus, these were considered as intervening variables in this study.

Figure 1. Conceptualized relationships between the independent and dependent variables



2.2. Study Sites

This study was conducted in four municipalities where BIDANI-Assisted Nutripak-Producer Women's Associations are located. These municipalities include: Baybay City, Hindang and Merida in Leyte and Macrohon in Southern Leyte.

2.3. Selection of Respondents and Sampling Procedure

The respondents came from the following BIDANI-Assisted Nutripak Producers Associations: the MASAGANA Rural Improvement Club (MRIC) in Baybay City, Leyte; Hindang Barangay Nutrition Scholars Nutripak Producers Association (HIBNUPA) in Hindang, Leyte; Merida Volunteers Nutripak Production and Food Processing Association (MERVNUPFA) in Merida, Leyte; and the Sta. Cruz Nutripak Producers Association (SACNUPA) in Macrohon, Southern Leyte.

This study used complete enumeration, which means that all of the active officers and members of the four selected BIDANI-Assisted Women's Associations were selected as respondents for this study. In Baybay, all the 20 association members were present during the data gathering (Table 1). Some of the members of the associations in Macrohon and Hindang were not available for the interview while in Merida, only 11 members have

remained active and were available for the survey. All in all, the study had 67 respondents distributed as follows: 20 from Baybay composed of 7 officers and 13 members, 19 from Hindang composed of 7 officers and 12 members, 17 from Macrohon composed of 5 officers and 12 members and 11 from Merida 5 of whom are officers and 6 are members.

Table 1: Distribution of respondents by association

ASSOCIATION	OFFICERS	MEMBERS	TOTAL	PERCENT
MASAGANA Rural Improvement Club (Baybay City)	7	13	20	29.9
HIBNUPA (Hindang, Leyte)	7	12	19	28.4
SACNUPA (Macrohon, So. Leyte)	5	12	17	25.4
MERVNUPFA (Merida, Leyte)	5	6	11	16.4
TOTAL	24	38	67	100.0

2.4. Data Collection Procedure

Before data collection, permission to conduct the study was secured from the Mayor and barangay captains of the municipalities and barangays where the associations are located. Permission was also secured from the presidents of the associations. Moreover, informed consent was sought from the selected respondents.

Primary and secondary data were used for the study. Primary data on the respondents' socio-demographic characteristics, management knowledge, attitudes, and management practices were gathered through personal interviews with the selected respondents using a self-made questionnaire. The questionnaire was divided into four parts as follows: (1) Socio-demographic Characteristics of Respondents; (2) Management Knowledge, (3) Attitudes and (4) Management Practices.

The Knowledge section determined the respondents' level of knowledge about the four identified managerial functions (Isenberg, 1986), namely: planning, leading, organizing and controlling.

On the other hand, the Attitude section measured the respondents' level of agreement or disagreement to statements related to the importance of applying the management knowledge introduced to them.

The Practice section determined the extent to which the members of the associations practice what they know about managing an association and its business.

Data on the associations' profile were gathered from the documents available in the associations' files, and through key informant interviews with association officers.

2.5. Data Analysis

Data on the associations' profile and the respondents' socio-demographic characteristics, knowledge, attitudes and management practices were analyzed using descriptive statistics including frequencies, percentages, totals and means.

On the other hand, relationships among variables, particularly between the respondents' socio-demographic characteristics (with interval measurement), knowledge, attitudes and management practices were determined using Spearman's rank order correlation, while relationships between the respondents' socio-demographic characteristics (with nominal measurement), and their levels of knowledge, attitudes and practices will be determined using the Chi-square test.

3. RESULTS AND DISCUSSION

3.1 Profile of the BIDANI-Assisted Associations

The profiles of the four associations are summarized in Table 2. All of these associations are composed of women members. All of the four also focused on the production of Nutripak, a nutritious food mix composed of rice, mongo, and sesame seeds. This Nutripak is used for the municipality's nutrition improvement program.

Table 2: Profile of the Nutripak producers associations

VARIABLE	ASSOCIATION			
	MRIC Baybay	HIBNUPA Hindang	SACNUPA Macrohon	MERVNUPFA Merida
Year organized	1999	2010	2012	2009
Years Active	18	7	5	8
Registration with DOLE	2015	2011	None yet	None yet
Number of original members	20	20	20	50

Number of members replaced	9	Unspecified	3	Unspecified
Number of active members	20	20	20	11
Ave. Annual Production Volume (in 20 grams/pack)	6,883	2,667	2,588	1,256
Annual Productivity of Labor	344.15	133.35	129.40	114.18

3.2. Socio-demographic characteristics of the respondents

3.2.1. Age, education attainment, civil status and number of children

Table 3 shows that majority of the members of the Nutripak producing associations are married, middle aged women with 1 to 3 children who only finished High school.

Table 3: Percent distribution of respondents by age, educational attainment, civil status and number of children[1]

SOCIO-DEMOGRAPHIC CHARACTERISTICS	ASSOCIATION				TOTAL (n = 67)
	MRIC Baybay (n = 20)	SACNUPA Macrohon (n = 17)	HIBNUPA Hindang (n = 19)	MERNUPA Merida (n = 11)	
Age					
Young (21 years and below)	0	0.00	0.00	9.1	1.5
Middle aged (22 to 45 years old)	45	35.3	63.2	36.4	46.3
Old (46 to 59 years old)	25	35.3	36.8	54.5	35.8
Senior citizen (60 years old and above)	30	29.4	0.0	0.0	16.4
TOTAL	100	100	100	100	100
Educational attainment					
Elementary	15	29.4	5.3	18.2	16.4
High school	40	47.1	52.6	27.3	43.3
College	45	23.5	42.1	54.5	40.3
TOTAL	100	100	100	100	100
Civil status					
Single	10	0	21.1	18.2	11.9
Married	60	88.2	68.4	72.7	71.6

SOCIO-DEMOGRAPHIC CHARACTERISTICS	ASSOCIATION				TOTAL (n = 67)
	MRIC Baybay (n = 20)	SACNUPA Macrohon (n = 17)	HIBNUPA Hindang (n = 19)	MERNUPA Merida (n = 11)	
Age					
Young (21 years and below)	0	0.00	0.00	9.1	1.5
Middle aged (22 to 45 years old)	45	35.3	63.2	36.4	46.3
Old (46 to 59 years old)	25	35.3	36.8	54.5	35.8
Senior citizen (60 years old and above)	30	29.4	0.0	0.0	16.4
Widow	20	11.8	10.5	0	11.9
Separated	10	0	0	9.1	4.5
TOTAL	100	100	100	100	100
Number of children					
No children	5	5.9	26.3	9.1	11.9
1 to 3 children	65	64.7	52.6	54.5	59.7
4 to 6 children	25	17.6	15.8	36.4	22.4
7 or more children	5	11.8	0	0	4.5
9 or more	0	0	5.3	0	1.5
TOTAL	100	100	100	100	100

[1]*Percent values per column are computed based on the total number of respondents per association*

3.2.2. Education, income and organizational affiliation

Table 4 shows that majority of the members of the Nutripak producing associations are women who are below poverty who gets monthly income from other means but many are plain housewives.

Table 4: Percent distribution of respondents according to their occupation, income and organizational affiliation[1]

SOCIO-DEMOGRAPHIC CHARACTERISTICS	ASSOCIATION				TOTAL (N = 67)
	MRIC Baybay (n = 20)	SACNUPA Macrohon (n = 17)	HIBNUPA Hindang (n = 19)	MERVNUPFA Merida (n = 11)	
Occupation*					
Plain housewife	45	17.6	15.8	18.2	25.4
Barangay Nutrition Scholar	0	5.9	57.9	0	17.9

Barangay Health Worker	5	29.4	0	0	8.9
Barangay official	0	23.5	0	9.1	7.5
Dressmaking	15	5.9	0	0	7.9
Animal raising	0	11.8	0	9.1	4.5
Manicure/pedicure	0	5.9	0	9.1	3.0
Food processing & vending	0	5.9	0	0	1.5
Others (4Ps teller, tricycle driver, not specified)	40	0	26.3	54.5	28.4
Monthly income					
Below poverty line (below P8,669.00)	95.0	88.2	100	100	95.5
Above poverty line (above P8,669.00)	5.0	11.8	0	0	4.5
TOTAL	100	100	100	100	100
Organizational affiliation*					
Women's association	100	100	100	100	100
Religious organizations	0	5.9	21.1	18.2	10.4
Others (PTA, barangay associations, etc.	0	0	21.1	36.4	11.9

[1]*Percent values per column are computed based on the total number of respondents per association*

3.2.3. Trainings attended

Table 5 shows that the members took other forms of training and most of them were able to attend the Nutripak processing training.

Table 5: Percent distribution of respondents according to the trainings they have attended

TRAININGS ATTENDED*	ASSOCIATIONS				TOTAL (n = 67)
	MRIC Baybay (n = 20)*	SACNUPA Macrohon (n = 17)*	HIBNUPA Hindang (n = 19)	MERVNUPFA Merida (n = 11)	
Nutripak and other food processing training	100	82.4	52.6	27.3	70.1
Financial management training	0	17.6	15.8	90.9	23.9
Bookkeeping	10	11.8	0	0	6.0
Strategic planning	0	5.9	0	0	1.5

BMIS	0	5.9	0	0	1.5
Handicraft making	0	23.5	5.3	0	7.5
Entrepreneurship training	25	0	0	0	7.5
Others	40	70.6	100	90.9	85.1

**Multiple response*

3.3 Management Knowledge, Attitude and Practices

It was found out in this study that generally, the members of the associations have Moderate Level of knowledge about managerial functions, Positive Attitude, and practice these managerial functions Moderately.

Table 6: Respondents' mean ratings on their level of knowledge, attitude and practice of the four functions of management

VARIABLE	ASSOCIATION				WEIGHTED MEAN
	MRIC Baybay (n = 20)	SACNUPA Macrohon (n = 17)	HIBNUPA Hindang (n = 19)	MERVNUPFA Merida (n = 11)	
Knowledge[1]	3.13 (M)	2.98 (M)	3.00 (M)	3.17 (M)	3.10 (M)
Attitude[2]	3.12 (P)	3.17 (P)	3.37 (VP)	3.07 (P)	3.19 (P)
Practice[3]	2.69 (M)	3.35 (H)	3.34 (H)	3.29 (H)	3.17 (M)

[1] Levels of knowledge: H = High (3.26 to 4.0), M = Moderate (2.51 to 3.25), L = low (1.76 to 2.50),VL = Very low or no knowledge at all (1.00 to 1.75)

[2]Attitude level: VP = Very positive (3.26 to 4.00), P = Positive (2.51 to 3.25), N = Negative (1.76 to 2.50), VN = Very negative (1.00 to 1.75)

[3]Extent of practice: H=Highly practiced or practiced to a great extent (3.26 to 4.00); M = Moderately practiced (2.51 to 3.25, L= Low practice or slightly practiced (1.76 to 2.50, VL= very low level of practice or not practiced at all (1.00 to 1.75)

3.4. Relationships among variables

3.4.1. MRIC in Baybay City, Leyte

There were no significant relationships between the MRIC respondents' civil status, educational attainment and position in the association and their knowledge, attitude and practice of the management functions (Table 7). This means that civil status, educational attainment and position in the association did not influence the respondents' level of management knowledge, attitudes and practice.

Table 7: Chi-square test results showing relationships between civil status, educational attainment and position in the association and the MRIC respondents' knowledge, attitude and practice

INDEPENDENT VARIABLES	DEPENDENT VARIABLES		
	Knowledge	Attitude	Practice
Civil status	4.722	7.714	6.078
Educational attainment	2.407	2.964	4.412
Position in the association	0.586	0.597	0.737

Table 8 shows that the other socio-demographic characteristics were also not able to influence the respondents' knowledge, attitude and practice.

Table 8: Results of the Spearman's rank correlation showing the relationships between the MRIC respondents' age, income and number of children and their knowledge, attitude and practices

INDEPENDENT VARIABLES	DEPENDENT VARIABLES		
	Knowledge	Attitude	Practice
Age	-.264	-.136	.213
Number of children	-.236	-.262	-.410
Monthly income	.073	.024	.199

Table 9 shows that only knowledge had a positive significant relationship with attitude (r=0.655, p<0.01). This means that as knowledge gets higher, their attitude gets more positive. This result can be related to the study of McPhetres et al. (2019) which indicated that increasing their respondent's knowledge about GM technology led to a more positive attitude towards GM Foods.

Table 9: Results of the Spearman's rank correlation showing the relationships between the MRIC respondents' knowledge, attitude and practices

VARIABLES	Knowledge	Attitude	Practice
Knowledge	1.000	.655**	.367
Attitude		1.000	.068
Practice			1.000

**. Correlation is significant at the 0.01 level (2-tailed).

3.4.2. HIBNUPA in Hindang

Table 10 shows that only the respondents' position in the association had a highly significant relationship with knowledge (X^2=9.744, p<0.01) and a significant relationship with attitude (X^2 = 6.378, r < 0.05). This means that the officers and members had different level of knowledge and attitude towards performing the management functions. This is to

be expected because members of an association appoint leaders that are competent. Meaning, the appointed leaders are those more knowledgeable and have more positive attitude.

Table 10: Chi-square test results showing relationships between civil status, educational attainment and position in the association and the HIBNUPA respondents' knowledge, attitude and practice

INDEPENDENT VARIABLES	DEPENDENT VARIABLES		
	Knowledge	Attitude	Practice
Civil status	4.045	2.670	6.078
Educational attainment	1.484	2.592	4.412
Position in the association	9.744**	6.378*	0.737

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

The HIBNUPA respondents' age, income and number of children and their knowledge, attitude and practices shows that there is no significant relationship between the variables (Table 11).

Table 11: Results of the Spearman's rank correlation showing the relationships between the HIBNUPA respondents' age, income and number of children and their knowledge, attitude and practices

	Knowledge	Attitude	Practice
Age	.263	.154	.118
Number of children	.319	.135	-.079
Monthly income	.085	.057	-.005

The HIBNUPA respondents' knowledge, attitude and practices (Table 12) shows that only attitude had a highly significant relationship with practice (r=0.727, p<0.01). This means that when the members have positive attitude, they tend to actually perform the management functions. This result can be related to a study by Chakraborty and Ganguly (2019) which indicated that positivity leads to more engaged workers.

Table 12: Results of the Spearman's rank correlation showing the relationships between the HIBNUPA respondents' knowledge, attitude and practices

	Knowledge	Attitude	Practice
Knowledge	1.000	.304	.408
Attitude		1.000	.727**
Practice			1.000

**. Correlation is significant at the 0.01 level (2-tailed).

3.4.3. SACNUPA, Macrohon, So. Leyte

The civil status, educational attainment and position in the association and the SACNUPA respondents' knowledge, attitude and practice (Table 13) shows that educational attainment had significant relationship with practice (X^2 = 6.929, p<0.05). This means that members with higher education attainment tend to have more actual practice of management functions compared to members with lower educational attainment. According to a web log post of Vista College (2019), people with higher educational attainment have stronger sense of responsibility that is why they perform more. While in table 14, the number of children had a significant negative relationship with practice (r = 0.596, p<0.05). This means that the members with more children had lesser actual practice of the management functions. This is because members with more children are busier.

Table 13: Chi-square test results showing relationships between civil status, educational attainment and position in the association and the SACNUPA respondents' knowledge, attitude and practice

INDEPENDENT VARIABLES	DEPENDENT VARIABLES		
	Knowledge	Attitude	Practice
Civil status	2.015	1.587	0.215
Educational attainment	1.647	0.176	6.929*
Position in the association	0.032	0.298	0.878

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Table 14: Results of the Spearman's rank correlation showing the relationships between the SACNUPA respondents' age, income and number of children and their knowledge, attitude and practices

*. Correlation is significant at the 0.05 level (2-tailed).

INDEPENDENT VARIABLES	DEPENDENT VARIABLES		
	Knowledge	Attitude	Practice
Age	.012	-.293	-.427
Number of children	-.339	-.317	-.596*
Monthly income	-.025	.129	-.087

Table 15 shows that there is a highly significant relationship between attitude and practice (r = 0.615, p<0.01). This means that members with more positive attitude tend to perform the management functions more.

Table 15: Results of the Spearman's rank correlation showing the relationships between the SACNUPA respondents' knowledge, attitude and practices

	Knowledge	Attitude	Practice
Knowledge	1.000	.369	.216
Attitude		1.000	.615**
Practice			1.000

**Correlation is significant at the 0.01 level (2-tailed)

3.4.4. MERVNUPFA in Merida

Table 16 shows that the respondents' position in the association had significant relationship with their practice (X^2 = 4.412, p<0.05). This means that the officers tend to perform management functions more than the members. This is to be expected since the officers are the more responsible members appointed by the association.

Table 16: Chi-square test results showing relationships between civil status, educational attainment and position in the association and the MERVNUPFA respondents' knowledge, attitude and practice

INDEPENDENT VARIABLES	DEPENDENT VARIABLES		
	Knowledge	Attitude	Practice
Civil status	2.357	0.917	2.933
Educational attainment	0.196	3.438	2.933
Position in the association	1.061	0.244	4.412*

* Correlation is significant at the 0.05 level (2-tailed)

Table 17 shows that there were no significant relationships between the MERVNUPFA respondents' age, income and number of children and their knowledge, attitude and practices.

Table 17: Results of the Spearman's rank correlation showing the relationships between the MERVNUPFA respondents' age, income and number of children and their knowledge, attitude and practices

VARIABLES	Knowledge	Attitude	Practice
Age	.023	-.384	-.503
Number of children	.264	-.178	-.408
Monthly income	-.037	.174	-.457

Table 18 shows that there were no significant relationships between the MERVNUPFA respondents' knowledge, attitude and practices.

Table 18: Results of the Spearman's rank correlation showing the relationships between the MERVNUPFA respondents' knowledge, attitude and practices

VARIABLES	Knowledge	Attitude	Practice
Knowledge	1.000	.156	-.097
Attitude		1.000	.415
Practice			1.000

3.5. Relationships of variables across associations

The results of the Chi square test shown in Table 19 presents that the respondents' level of management knowledge and the practice level significantly differed according to the nutripak producers association where they belonged.

Table 19: Chi square test results showing the relationships between location of the association, civil status, educational attainment and position in association, and the respondents' knowledge, attitude and practices

INDEPENDENT VARIABLES	DEPENDENT VARIABLES		
	Knowledge	Attitude	Practice
Respondents' association	19.830**	7.174	19.112**
Civil status	8.913	1.949	5.525
Educational attainment	2.737	3.865	4.732
Position in the association	3.681	2.162	0.343

On the other hand, Table 20 shows that respondents' age had a significant positive relationship with the respondents' knowledge on the four functions of management (r=0.254; $p < 0.01$). This means that the older the respondents become, the higher will their knowledge be about the functions of management because of experience. And the number of children had a highly significant but negative relationship with practice. This

means that having more children leads to less actual practice performed. This is due to more time allocated to taking care of children than focusing on the associations goals.

Table 20: Results of the Spearman's rank correlation showing the relationships between the respondents' age, income and number of children and their knowledge, attitude and practices

INDEPENDENT VARIABLES	DEPENDENT VARIABLES		
	Knowledge	Attitude	Practice
Age	.254*	-.119	-.159
Number of children	.139	-.223	-.362**
Monthly income	.076	.095	.098

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Analysis using Spearman's rank order correlation was also done to determine relationships among the respondents' management knowledge, attitude and practices. Table 21 had a unique result. It showed that knowledge had a significant but negative correlation with practice (r= -0.310; p<0.05). The results indicate that having higher level of knowledge does not directly result to improved level of practice or work. On the other hand, Table 20 shows that attitude had a highly significant relationship with practice (r = 0.477, p<0.01). This means that positivity leads to more engaged workers.

Table 21: Results of the Spearman's rank correlation showing the relationships between the respondents' knowledge, attitude and practices

VARIABLES	Knowledge	Attitude	Practice
Knowledge	1.000	.029	-.310*
Attitude		1.000	.477**
Practice			1.000

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

4. CONCLUSIONS

1. Results of the study showed that majority of the respondents are married, middle aged women with 1 to 3 children who only finished High school. They are also below poverty who gets monthly income from other means but many are plain

housewives. They took other forms of training and most of them were able to attend the Nutripak processing training.

2. It was found out in this study that generally, the members of the associations have Moderate Level of knowledge about managerial functions, Positive Attitude, and practice these managerial functions Moderately.
3. Results of the Chi square tests and Spearman's rank order correlation for the mean data showed that the respondents' association had a highly significant relationship with knowledge (χ^2 = 19.830; p = 0.003) and practice (χ^2=19.112; p = 0.004), age had a significant and positive relationship with knowledge (r=0.254; p < 0.01), while number of children had a highly significant but negative relationship with knowledge (r = 0.363; p < 0.01).
4. Knowledge had a significant but negative correlation with practice (r= -0.310; p<0.05), while attitude had a highly significant positive relationship with practice (r = 0.477, p<0.01).

5. Recommendations

Based on the results of the study, the following are recommended to improve the level by which the associations practice the needed management functions for the success of their livelihood projects:

1. Expose the respondents to more training activities on value formation and entrepreneurship for them to know their importance. It is noted that most of their trainings were centered on the production of nutripak and only few of them were sent to training on entrepreneurship and other business-related topics like planning, leadership, record keeping and others.
2. BIDANI, LGU and other assisting agencies must include monitoring the associations' activities, not just conducting one-shot training, to make sure they put into practice what they have learned and also to assist them in doing the activities properly until such time that they can do it alone.
3. Select older members to attend trainings but not too old since old age comes with a lot of physical and mental constraints. The association must select women-members with lesser children, especially those who will be voted as officers for them to have enough time for the association activities.

REFERENCES

Bas, M., Ersun, A.S., Kivanc, G. (2006). The evaluation of food hygiene knowledge, attitudes, and practices of food handlers' in food businesses in Turkey. Retrieved from http://www.sciencedirect.com/science/article/pii/S0956713504002683

Bepari A, Niazi SK, Rahman I, Dervesh AM. (2019). The comparative evaluation of knowledge, attitude, and practice of different health-care professionals about the pharmacovigilance system of India. J Adv Pharm Technol Res 2019;10:68-74

BIDANI Office, VSU. (2005). *TeknoGabay Leaflet No. 4*. [Leaflet], http://vicarp.vsu.edu.ph/vicaarp/TPDisk/Utilities/Technologies/Health/E%20-%20nutripak.pdf (Accessed 2016-10-18).

Chakraborty, T., & Ganguly, M. (2019). Crafting Engaged Employees Through Positive Work Environment. *Advances in Human Resources Management and Organizational Development Management Techniques for Employee Engagement in Contemporary Organizations,* 180-198. doi:10.4018/978-1-5225-7799-7.ch011

Chuang, Jui-Hsiung; Wang, Jiun-Hao; Liou, Yu-Chang. (2020). "Farmers' Knowledge, Attitude, and Adoption of Smart Agriculture Technology in Taiwan" *Int. J. Environ. Res. Public Health* 17, no. 19: 7236. https://doi.org/10.3390/ijerph17197236

Cruz, Karen. (2014). BIDANI Barangay Integrated Development Approach for Nutrition Improvement. Information Sharing. 10 August. http://www.slideshare.net/KarrenCruz/bidani (Accessed 2016-10-18).

DFID. (2002). Poverty and Environment: Measuring the links

Egbu, C.O., Hari, S., Renukappa, S.H., (2005). Knowledge management for sustainable competitiveness in small and medium surveying practices. Retrieved from http://www.emeraldinsight.com/doi/abs/10.1108/02630800510586871

Hamed Alzoubi, Nedal Alnawaiseh, Asma'a Al-Mnayyis, Mohammad Abu- Lubada, Amin Aqel and Hani Al-Shagahin. (2020). COVID-19 – Knowledge, Attitude and Practice among Medical and Non-Medical University Students in Jordan, *J. Pure Appl. Microbiol.* ; 14(1): 17-24 https://doi.org/10.22207/JPAM.14.1.04

Isenberg D. (1986). Strategic Opportunism: Managing under uncertainty, Harvard Graduate School of Business, Working paper / Daniel Isenberg. –Boston: Prentice Hall, –346 p.

Kourilsky, M.L., Walstad, W.B. (2004). Entrepreneurship and female youth: knowledge, attitudes, gender differences, and educational practices. Retrieved from http://www.sciencedirect.com/science/article/pii/S0883902697000323

Mainack Dione, M., Dohoo, I., Ndiwa, N., Poole, J., Ouma, E., Amia, W. C., & Wieland, B. (2020). *Impact of participatory training of smallholder pig farmer's on knowledge, attitudes and practices regarding biosecurity for the control of African swine fever in Uganda. Transboundary and Emerging Diseases.* doi:10.1111/tbed.13587

Mateo, J.P., Campbell, I., Cottier-Cook, E.J. *et al.* (2021). Understanding biosecurity: knowledge, attitudes and practices of seaweed farmers in the Philippines. *J Appl Phycol*. https://doi.org/10.1007/s10811-020-02352-5

Mcphetres, J., Rutjens, B. T., Weinstein, N., & Brisson, J. A. (2019). Modifying attitudes about modified foods: Increased knowledge leads to more positive attitudes. *Journal of Environmental Psychology, 64*, 21-29. doi:10.1016/j.jenvp.2019.04.012

Palati S, Ramani P, Shrelin HJ, Sukumaran G, Ramasubramanian A, Don K R, Jayaraj G, Santhanam A. (2020). Knowledge, Attitude and practice survey on the perspective of oral lesions and dental health in geriatric patients residing in old age homes. Indian J Dent Res 2020;31:22-5

Schwartz, D. J. (1976). Implications For Personnel Measurement. *PersonnelPsychology*, *29*(4), 521–526. doi: 10.1111/j.1744-6570.1976.tb02073.x

The Importance of Higher Education in the 21st Century [Web log post]. (2019). Retrieved June 17, 2020, from https://www.vistacollege.edu/blog/resources/higher-education-in-the-21st-century/