Assessment of the implementation of community-based projects of the Department of Science and Technology, Eastern Visayas, Philippines

Lucia Padul-Dauzi

Department of Science and Technology Regional Office VIII, Government Center, Palo, Leyte, Philippines

Abstract

Community-based projects are established as a strategy to create jobs and alleviate poverty. This study assessed the implementation of the Department of Science and Technology Grant-in Aid funded community-based projects in Eastern Visayas, Philippines. The study utilized the descriptive survey research design utilizing a researcher made survey questionnaire. Primary data gathering was carried out by the researcher with the assistance of the assigned staff in the provinces. The generated data were subjected to descriptive statistical analysis. The findings revealed that majority of the community-based projects run by the Associations are sustainable with other projects still in the initiation stage. There is sufficient financial assistance availed from Department of Science and Technology regional office. Many projects are operating within timeframe, moderately stable while others are still in the process of liquidating the availed funds. Project proposals approved for regional funding are prepared by the provincial science and technology centers in cooperation with the local government unit or the state universities and colleges and in consultation with the officers and members of the Association. These concerned agencies do not regularly check the book of accounts of project beneficiary nor monitor project implementation period based on the memorandum of agreement. The local government unit and does not submit the quarterly financial report and audited financial report on time. It is concluded that the implementation of community-based projects is carried out in consonance with the required processes and activities during project pre-operation, project operation, project monitoring and project evaluation. During project operation, delays in equipment acquisition occurred pending bidding requirements and limited number of fabricators of equipment. The researcher recommends that community-based project beneficiaries should contribute in the preparation of the project proposals for funding though the conduct of Community Life Competency Program.

Keywords: Community-based project, local government unit, state university and colleges, department of science and technology, provincial science and technology center

1. Introduction

A community project is a term applied to any community-based development project as a tool to eradicate poverty, and create an enabling environment for citizens to participate in improving their quality of life. The project focuses on what the community can do using available resources, and

i Correspondence email: lucy71865@gmail.com

encourage the use of maximum potential to be able to move away from dependency syndrome with the government.

Responding to the quest for poverty alleviation in the communities, the Department of Science and Technology (DOST) implemented its Grant-in Aid (GIA) program nationwide. The DOST was established in 1987 mandated for central direction provision, leadership, and coordination of scientific and technological initiatives which ensures that all efforts are geared towards maximum economic and social improvement and sustainability of the populace. The DOST envision that Science and Technology can impact concrete and substantial improvement of the Eastern Visayas productivity and competitiveness, and play a vital role in socio-economic development. As indicated in DOST Administrative Order No. 006 (2004), the Grant-in Aid (GIA) program aims to harness the S&T capabilities thereby spur sustainable economic progress and development. Its goal is to contribute towards productivity enhancement and attain high quality of the Filipinos, generate and promote suitable technologies, reinforce participation of all S&T sectors especially in research and development (R&D).

The DOST priority programs are (1) Technology Transfer and Commercialization (TTC) Program, (2) S&T Human Resource Development & Promotions (STHRDP), and (3) Regional Standards & Testing Laboratory (RSTL). The GIA is a grant fund or program under the Technology Transfer and Commercialization. It is a proposal-based program provided to "people's organizations (POs), non-government organizations (NGOs), national government agencies (NGAs), local government units (LGUs), state universities and colleges (SUCs)", and partner institutions for the production and commercialization of different technologies developed and conduct of S&T related activities in the region. Priority sectors are furniture, food processing, gifts and holiday decors (GHD), marine, fishery and aquatic resources (Padua, Abocejo and Mirasol, 2011), "metals and engineering, horticulture, agriculture and information and communications technology (ICT)". The time frame allowed to complete the implementation of GIA projects is one year, but request for extension when justified, is usually approved and granted for a maximum of two (2) years (DOST AO No. 006, series of 2004). The mode of implementation of the program is through Small Enterprise Technology Upgrading Program (SET-UP), Noncommunity-based, and Community-based projects.

Meanwhile, the SET-UP is a nationwide strategy which encourages and assists the "local micro, small and medium scale business firms to implement technological innovations and improvements in their operations in terms of productivity, product quality, manpower development, cost of production, waste management and other related activities". It helps to "modernize the production line of firms and indirectly stimulate the country's economic growth" (Abocejo, 2017). Ultimately, this would encourage the "micro, small and medium enterprises (MSMEs)" to innovate and infuse technological interventions to each plant operation.

Commodity specific intervention is based on existing initiatives, programs and projects at the community which involves identification of the most abundant resources in the community and unique products (either raw materials, intermediate or finished products) that can be produced from those resources providing essential inputs at the different stages of value/supply chain. Crucial is the participation of the LGUs of the community or SUCs where the product is being produced. The producers, the traders and retailers, DOST and other government agencies providing assistance to the project, NGOs, and POs operating in the area or have participation in the industry.

The projects are anchored on a specific geographic location in a village or in a municipality. In Eastern Visayas, some of the community-based projects are the establishment of a common service facilities (CSFs) for the processing of banana, cassava and 'taro root' into chips,

coconut sap into sugar, cacao into chocolate or "tableya", engineered bamboo, charcoal into briquettes, etc., where beneficiaries are organized groups/associations in the communities implemented in cooperation with SUCs and LGUs.

GIA activities and project proponents are identified and indorsed by Project Coordinators and Provincial S&T Directors. Counterpart funds of the proponent is a requirement in the approval of the project proposal. The major item of projects approved for funding are the acquisition of technology-based equipment to be used in the production of a particular product and the packaging and labelling of the product being produced. Once approved, a Memorandum of Agreement (MOA) is signed by and between DOST8 and the respective LGUs or SUCs where the beneficiary group is located.

An Association (the beneficiary) is a group of individuals with common views organized towards a common goal. "The main feature of an Association is meant for certain definite purpose/s which are realized through the co-operative efforts of its members. The motive for people to come together is to combine their energy and share resources to create or provide services and programs which they desire for themselves or to give to others. Associations are managed by an elected management committee or board. The lead position of this management committee is called the President".

The devastation brought about by typhoon Yolanda, international name Haiyan, in November 2013 halted operations and destroyed a number of community-based projects in the provinces (Aguirre and de Cadiz, 2015). Many equipment were lost or became non-functional, beneficiaries lost access to production centers and with the change of environment, raw materials were no longer available. Formed Associations and their beneficiaries were forced to reorganized a new set of leaders to continue operations. The typhoon Yolanda brought extensive damage to houses, livelihoods and infrastructure and government estimated that about 14.1 million people were affected and 4.1 million individuals were displaced (Almazan et al., 2018).

Fischetti (2013) reported that typhoon Yolanda was one of the strongest storms ever recorded to hit the Philippines. Along the southern coast of Eastern Samar, the coastal towns of the Leyte Gulf, the provinces of Eastern and Western Samar and Leyte, devastating damage by typhoon Yolanda caused the destruction of many private houses, businesses and public buildings severely affecting the Eastern Visayas Region. Several community development-projects did not succeed in sustaining themselves, ceased to be self-reliant. Many community projects discontinued operations after funding organizations withdrew their commitments (Githinji, 2013). In this regard, this study looked into the soundness of the findings of the World Vision report (World Vision, 2015), hand in hand with the reports received and the DOST8 monitoring and evaluation (M&E) Committee on problems in the implementation of community-based projects in Region 8.

This study is pursued by the researcher since she possessed the knowledge on the dynamics of Associations or organized groups in the communities being the regional Coordinator of GIA Program. The topic is within the mandate of DOST that needs to be studied in order to provide interventions to improve its implementation. The findings of this paper hopes to contribute to the body of knowledge concerning government project implementation in Eastern Visayas region. Recognizing the aforementioned premises, the study was conducted to provide insights and understanding on the processes and mechanisms by which the program operates, as well as assessing whether the program implementation is on the right track and doing the right things to achieve its objectives. The paper endeavored to assess, document and generate information crucial for the effective implementation of community-based projects of DOST in Eastern Visayas.

1.1 Study objectives

This study assessed the implementation of the Department of Science and Technology (DOST) Grant-in Aid (GIA) funded community-based projects in Eastern Visayas for the period 2009 – 2014. Specifically, the study evaluated the status of the Association, the profile of the leaders of the community-based projects following eight indicators, the profile of the Regional Program Coordinator and the Provincial Science and Technology Directors according to pre-identified six indicators, the extent of implementation of the community-based project based on four key areas, the status of operations of project beneficiaries after availing the DOST8 financial assistance in the areas of financing, marketing, production and personnel/organization.

2. Literature Review

The community-based projects are funded under the grant in aid (GIA) budget of the Department of Science and Technology. GIA fund is released to the regional office for the implementation of Small Enterprise Technology Upgrading Program (SET-UP), and another GIA fund is released as part of the general appropriations act (GAA) for the implementation of community-based and non-community-based projects (DOST Administrative Order No. 004, 2008).

Considering that the implementation of community-based project requires a manager to have knowledge on project management, the guidelines on "Project Management Body of Knowledge (PMBOK)" provide insights and understanding on this context. In PMBOK, project management is defined as the process to achieve "project objectives (schedule, budget and performance) through a set of activities that start and end at certain points in time and produce quantifiable deliverables" with the desired quality.

"Evaluation is the systematic collection of information about activities, characteristics, and outcomes of projects to make judgments about the project, improve effectiveness, and/or inform decisions about future programming" (Patton, 1987). "Evaluation is not merely the accumulation and summary of data and information about a project. Importantly, evaluation provide managers with well-documented and considered evidences to support the decision-making process" (Pañares and Abocejo, 2019).

Government programs are implemented to alleviate poverty in the countryside (Abocejo et al, 2012). "Poverty has many dimensions and causes, but one thing that most of the world's poor have in common is lack of power and influence (Abocejo, 2017). This can be seen as a cause of poverty [the voice of the poor is rarely heard in allocation and decisions] (Fernandez and Abocejo, 2014), as an aspect of that poverty [lack of voice being a condition of the poor] and as an effect of poverty [low levels of human capital, in particular, may result in limited ability to exert influence]" (Moore and Putzel, 1999).

Further, "community ownership by poor rural people is another critical factor contributing to the sustainability of project benefits (Abocejo et al., 2012). Ideally, this should entail involvement of project participants at all stages of the cycle: design, implementation, and monitoring and evaluation (M&E). Drawing on its own experience and that of other international development institutions, IFAD places a high priority on engagement with potential participants, partners and other stakeholders prior to project design and attempts to support on-going local initiatives whenever possible" (International Fund for Agricultural Development [IFAD], 2009).

Accordingly, taking care of individual and collective needs is the main motive why communities are organized (Alvarez, Ong and Abocejo, 2017). However, in the last five decades, "many attempts at getting people to participate and take responsibility for community-based development" did not reap substantial success. A fundamental pre-requisite of "successful

participatory programs at the community level is the reversal of control and accountability from central authorities to the community level" (Narayan, 1995). Strong community participation is a key ingredient in the sustainability of projects (Abocejo et al., 2012)

In the heart of community-based development initiatives is the "active involvement of members in at least some components of project design and implementation" (Pañares and Abocejo, 2019). Although participation can occur at many levels, a key objective is the "incorporation of local knowledge into the project's decision-making processes. One of the key objectives of participation is to incorporate local knowledge and preferences into the decision-making processes of governments, private providers (Abocejo, 2015) and donor agencies". When potential beneficiaries are able to make key decisions, participation becomes self-initiated action - what is known as the "exercise of voice and choice," or "empowerment." Participation is expected to "lead to better-designed development projects, more effective service delivery, and improvements in the targeting of benefits" (Mansuri, and Vijayendra, 2004).

Community based organizations are set to "broaden the base of self-governance and diffusion of power through a wider circle of the population" (Igberaese and Dania, 2015). "It is seen as voluntary, non-profit, non-governmental and highly localized or neighborhood institutions whose membership is placed on equal level and whose main goal is the improvement of the social and economic well-being of every member" (Abegunde, 2009).

The Republic Act 7722, or the Commission on Higher Education (CHED) mandates "institutions of higher learning like State Universities and Colleges (SUCs) to respond to the call for societal transformation. Among SUCs most extension programs are demand driven and accreditation driven (Odron-Padullo. (2018). Demand driven is community-based that encompass basic functional needs and demands designed to establish and promote the general well-being of the rural and urban populace (Inabangan, Garcia and Abocejo, 2019). Usually this is requested by the Local Government Units (LGUs) concerned upon identification of the specific needs of their constituents" (Pañares and Abocejo, 2019). Moreover, the "accreditation driven extension programs are implemented in response to the requirements by an *accrediting body*" (Bidad and Campiseño, 2010).

Moreover, the non-government organizations (NGOs) played "important facilitative and capacity building role in many respects, helping to bridge divergent views between local people and government agencies and manage conflict within or among communities (Pañares and Abocejo, 2019). In some countries, government departments used NGOs as project implementers" (Shackleton et al., 2002). Community-based projects are participated in by different individuals and personalities who are experienced and knowledgeable in running the projects to meet various needs of families and communities.

Khwaja (2001) argued that community managed projects are better maintained, and are more sustainable compared with those managed by local governments. For community-based projects, the external support from SUCs and LGUs are significant in their operations because technical assistance and project supervision are necessary to successfully implement the project, like the provision of technology training, consultancy services and marketing of products. As part of the extension services of SUCs and LGUs, identified communities with organized groups/associations are closely monitored by funding agencies in helping them become self-reliant in the future.

Sound selection of community-based project beneficiaries/associations are usually undertaken by the DOST8 Provincial S&T Directors in cooperation with the LGUs and SUCs as they are knowledgeable on the type and kind of assistance to be provided to the group as they conduct evaluation and technology needs before providing the assistance. Further, the main

argument in favor of CBD is that "communities possess better knowledge of the prevailing local conditions (such as who is poor and deserves to be helped, or the characteristics of the local microenvironment), and a better ability to enforce rules, monitor behavior, and verify actions related to interventions" (Platteau and Gaspart, 2003). Unlike the common view that everything which is local possesses 'naturally democratic' qualities (Platteau and Abraham, 2002; Watson, 2003), communities are more susceptible to local elites as local power groups can easily connive away from higher-level institutions control and evade media attention (Fjeldstad, 2004).

Communities are generally associated with people's organization (POs) and small groups which are organized to achieve specific project objectives. This study included the different key officials who serve as project facilitators such as the President of the Association, the Regional Program Coordinator and the Provincial S&T Directors to examine their contributions in the community-based project operations.

Of the community-based projects assessed while still in their initiation stage of project implementation, the delays in equipment acquisition contributes to their failure to operate the project within the approved timeframe, consequently affecting the interest of members of the Association to proceed with the operation because of such delays. Apparently, project leaders question whether or not their project is potentially valuable to their own organization, thus, acceptance is a strong predictor of project failure.

2.1 Theoretical and conceptual framework

This study anchored its framework on the Theory of Change by Weiss (as cited in Connell and Kubisch, 1998). General System Theory by Von Bertalanffy (1968), "Context, Input, Process, Product (CIPP) evaluation model by Stufflebeam" (as cited in Zhang et al., 2011) and Theory of Project Management as indicated in the PMBOK.

The Theory of Change by Weiss (as cited in Connell and Kubisch, 1998) is defined simply and elegantly as a theory of how and why an initiative works. This definition suggests that the first step toward evaluating a Comprehensive Community Initiative (CCI) is to "determine its intended outcomes, the activities it expects to implement to achieve those outcomes, and the contextual factors that may have an effect on implementation of activities, and their potential to bring about desired outcomes". The Theory of Change (Weiss, 1995) bears importance on evaluative nature of the study with focus on the community-based project implementation in the region, and how the project improved the quality of life of project beneficiaries as reflected in their status after availing the financial assistance. Anchoring to the Theory of Change Weiss (as cited in Connell and Kubisch, 1998) shed light on the planning and implementation of community-based projects during the pre-operation, operation, monitoring and evaluation.

The General System Theory, advocated Von Bertalanffy in 1968 provides an "analytical framework that can be used to describe some of the many factors involved in community development. Some of the key concerns in community development, such as assessing power and influence, understanding the dynamics of inter-group relationships, and considering the changes involved in planning development activities, can be understood and described using System Theory". The said framework is relevant to community-based project implementation in the region that is used to describe some of the many factors that influences the operation of associations as project beneficiaries. Associations are considered as systems and as such, it is composed of interrelated parts. These various parts include human beings/members of the Associations who requires physical energy in the form of food in order to survive resulting to participation in community-based project implementation in order to meet the various needs of their families.

The CIPP evaluation model (Stufflebeam, as cited in Zhang et al., 2011) emphasized that "all four components of CIPP evaluation model play important and necessary roles in the planning, implementation, and assessment of a project". The product evaluation component measures, interprets, and judges project outcomes and interprets their merit, worth, significance, and probity. The CIPP evaluation model is "a comprehensive framework for conducting formative and summative evaluations of projects, personnel, products, organizations, and evaluation systems" (Stufflebeam and Shinkfield, 2007). Recognizing those concepts, reflected in the conceptual framework of this study is the CIPP used to define the different variables considered as subjects for research from input to outcome (Figure 1).

The Theory of Project Management (Koskela and Howell, 2002) may better address the context that fall under this study. Project management, as a set of processes, "encompasses the tools, techniques, and knowledge-based practices applied to projects to achieve organizational goals and deliver products or services" (Sopko, 2015). Similar to community based project implementation in the region, controlling, planning and scheduling are activities being undertaken by LGUs, SUCs, DOST8, and project leaders to guide project operation into the right track and do the right things to meet the objectives. In essence, technology training programs for community-based project beneficiaries are organized and undertaken by DOST8 in cooperation with partner agencies to develop and enhance capabilities of persons involved in the project operation.

In this study, project life cycle adopted four stages of project management which starts from project pre-operation, project operation and project monitoring and project evaluation. These stages capture the five different project life cycle indicated in the PMBOK.

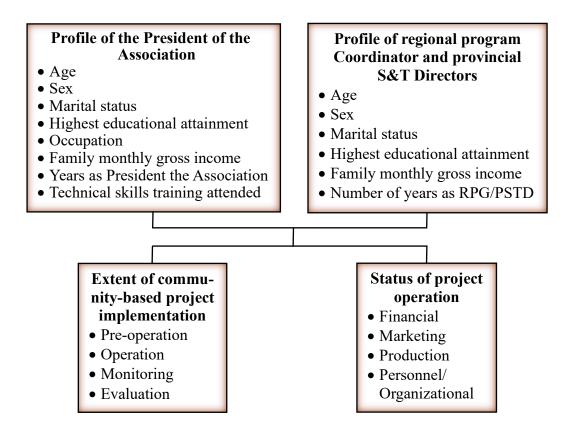


Figure 1. Conceptual Framework of the Study

This study focuses on the assessment of the community-based projects implemented by DOST in Eastern Visayas emphasizing the (1) status of the Association in the following areas, (20) year organized, (3) number of years of operation, (4) number of members, sector, amount of DOST8 financial assistance, (5) number of years of availment of DOST financial assistance, (6) number of years of operation after completion of DOST8 assistance, (7) status of liquidation of the financial assistance and status of project operation. Profile of project leaders concerning their age, sex, marital status, highest educational attainment, occupation, family monthly gross income, number of years as president of the Association, and technical skills training attended sponsored by DOST8. Profile of Regional Program Coordinator and Provincial S&T Directors concerning their age, sex, marital status, highest educational attainment, family monthly gross income, and number of years as PSTD/RPC.

Extent of Implementation of community-based project during project pre-operation, project operation, monitoring and evaluation; and Status of project operations after availing the DOST8 financial assistance concerning the areas in financial, marketing, production, personnel/organizational. Those areas were studied in order to elicit policy directions and inputs for the effective and efficient implementation of community-based projects of DOST8 in the future.

3. Research Methodology

3.1 Research design

The study employed a descriptive survey research design with the questionnaire as the main tool for data gathering. It described the status of respondent groups/associations; the profile of the President of Associations, the profile of the Regional Program Coordinator (RPC) and Provincial S&T Directors (PSTDs), the extent of community-based project implementation, and the status of operation of the Associations after availing the DOST8 financial assistance. Collection of data and the tabulation of the frequencies on research variables were employed.

3.2 Study locale

The study was conducted in the six provinces of Eastern Visayas covering the provinces of "Leyte, Biliran, Southern Leyte, Samar, Eastern Samar and Northern Samar". The DOST Regional Office No. 8 is located at the Government Center, Pawing, Palo, Leyte, Philippines.

3.3 Study respondents

This research endeavor is a consolidated inputs of the different respondents who are knowledgeable of the GIA community-based project implementation such as the President of the Beneficiary Group/Association (45), the GIA Regional Program Coordinator (1) and Provincial S&T Directors (6) in the provinces in the region using a structured questionnaire. Due to accessibility and time constraints, out of 60 community-based projects implemented from Calendar Year 2009 to 2014, only 45 or 75 percent were visited and considered as respondents of the study.

Further, of the 15 out of 60 community-based project beneficiaries for the period, five (5) projects were visited but respondents disclosed that they are not yet organized at the time of data gathering, but were organized during project identification and before the occurrence of typhoon Yolanda on November 2013. Of the 5 projects that are still to organize, 2 were in the province of Leyte (availed in 2013 and 2014); 2 from the province of Northern Samar (both availed in 2014) and 1 from the province of Southern Leyte (availed in 2012).

3.4 Ethical considerations

Prior to the conduct of the study, written permission was sought from the Regional Director of DOST8 and all head of involved agencies and SUCs in all covered provinces. Voluntary participation of identified research respondents was ensured. Full consent from the research respondents was also obtained. The purpose of the study was clearly explained. Measures had been undertaken to ensure that the research respondents were in any way not harmed along the conduct of the study. They were given assurance on the full confidentiality of their responses in order to elicit honest and sincere answers to the instrument. All the information derived from the study were dealt with utmost confidentiality and was solely used for the study.

3.5 Research instrument

The researcher used a questionnaire designed to gather the needed information composed of four parts. Part 1- Status of the project beneficiary/association in the following areas: year organized, number of years of operation, number of members, sector, amount of DOST8 financial assistance, number of years of availed DOST8 financial assistance, number of years of operation after completion of DOST8 financial assistance, status of liquidation of the financial assistance and status of project operation. Part 2 - Profile of the President of the beneficiary group/association concerning their age, sex, marital status, highest educational attainment, occupation, family monthly gross income, number of years as president of the Association and technical skills training attended sponsored by DOST8.

Part 3 - Profile of Regional Program Coordinator and Provincial S&T Directors concerning their age, sex, marital status, highest educational attainment, family monthly gross income and number of years as RPC/PSTD. Part 4 - Extent of Implementation of community-based projects during project pre-operation, project operation, monitoring & evaluation; and Part V-Status of operations of project beneficiaries after availing the DOST8 financial assistance concerning areas in financial, marketing, production, and personnel/organizational.

3.6 Validation of research instrument

After the questionnaire was drafted, it underwent content validation by a panel of examiners for comments and suggestions. The revised questionnaire was pilot tested among the six Provincial Science and Technology Directors during the RTEC meeting. The result of the pilot test was processed to determine if there were items for deletion and for revision. Suggestions and comments were considered and integrated in the questionnaire. The researcher, with the assistance of the SET-UP project staff assigned by the PSTDs in the six provinces fielded the final instrument to identified respondents in the region.

3.7 Data gathering procedure

The researcher sought the approval of the Regional Director of DOST8 on the topic for research and requested the assistance of concerned DOST8 personnel before the conduct of actual data gathering. Likewise, permission and support was requested from the Provincial S&T Directors (PSTDs) in the six provinces of Eastern Visayas region for the dissemination of information regarding the visit of the researcher, to make sure that respondents were informed of the project visit prior to the conduct of the study.

After receiving the approval, the final schedule of GIA project visits was scheduled for each of the provinces in Samar, Eastern Samar, Leyte, Biliran, Southern Leyte and Northern Samar. The actual data gathering was conducted personally by the researcher together with the SET-UP project staff assigned by the PSTD to assist in the fielding of the questionnaire.

A short briefing about the survey questionnaire, purpose of the study and the method to fill-out the questionnaire was made to each respondent. Respondents were given enough time to accomplish the research instrument and retrieved at once after filling-up. In cases where there were lacking responses of the respondents, an interview was conducted to clarify items. The responses were then tallied, analyzed and interpreted.

Both primary and secondary data were gathered to obtain a complete and comprehensive information regarding program. The primary data were obtained from the responses of the respondents and the secondary sources of information were the reports on file and records on the periodic monitoring conducted by the DOST8 monitoring team for the period covered in the study.

3.8 Treatment of data

The processed data were subjected to statistical treatment to answer the formulated research questions of the study using Microsoft Excel for Windows. Descriptive statistics like frequency count, percentage and weighted mean (WM) were derived and presented in appropriate data analysis tables.

4. Results and Discussion

4.1 Profile of the president of the association

It can be gleaned from Table 1 that only 1 (2 percent) of the president-respondents is above middle age (51 years old and above), while 22 (49 percent) are in their middle age (31 to 50 years old) and 22 (49 percent) are fairly young (30 years old and below). The data suggest that majority of the Presidents of the community-based projects are both in the middle and fairly young age group which implies that they are still enthusiastic in proceeding and undertaking different group related endeavours, with the drive and confidence to apply knowledge and skills gained to effectively operate the Association, for the welfare of the members and officers, and the community as well.

By sex, 19 out of 45 president-respondents (42 percent) were males while their female counterparts were 26 (58 percent). This is understandable since the community-based project beneficiaries in the region are mostly women's organization whose elected President are also women. This suggests that women surpass men in leading community-based projects. The result supports the program of the government on gender and development (GAD) in its quest of enhancing women's participation (Abocejo, et al., 2012). Findings is also consistent with the work of Woolcock (2001) where "anecdotal evidence to suggest that in many poor communities, women primarily possess the intensive 'protection' networks, while men have access to more extensive 'innovation' networks" (Goldstein, 1999).

As to marital status, only one (2 percent) of the forty-five president of the Association was single, 37 (82 percent) were married, 5 (11 percent) were widow and 2 (5 percent) were separated. This finding reflects that majority of the president of the Association have already families of their own. With respect to educational attainment, two (4 percent) were elementary level, twelve (27 percent) reached the secondary level, 29 (64 percent) were college level and two (4 percent) were able to reach graduate level of studies. This result indicates that majority of the Associations' presidents were educated, have entered college education or have finished their undergraduate studies. The finding may also suggest that education enhances one's social capital, easy access to information and other resources, competent, have the capability of leading a particular community project, and able to build and maintain partnerships.

By occupation, eleven (24 percent) of the president-respondents were farmers; 26 (58 percent) were entrepreneurs and eight (18 percent) were employed in either the public or the

Table 1. Profile of the association president-respondents

| Prof | ile Variable and indicate | | 1 - | · • |
|------------|--|----------|---------------|----------------|
| | ne variable and maleate | Л | Frequency | Percent (%) |
| Age | :l., | | 22 | 49.90 |
| | irly young | | | 48.89 |
| IVI1 | iddle age oove middle age | | 22 1 | 48.89 2.22 |
| At | ove illiquie age | Total | 45 | 100.00 |
| Sex | | Total | 15 | 100.00 |
| | male | | 26 | 37.78 |
| Ma | | | 19 | 42.22 |
| IVI | ale | T-4-1 | | |
| 3.5 1.10 | | Total | 45 | 100.00 |
| Marital S | | | | |
| | arried | | 37 | 82.22 |
| Wi | idow | | 5 | 11.11 |
| Se | parated | | 2 | 4.45 |
| Sir | ngle | | 1 | 2.22 |
| | | Total | 100.00 | 100.00 |
| Highest I | Educational Attainment | | | |
| _ | ollege level | | 29 | 64.44 |
| | condary level | | 12 | 26.66 |
| | mary level | | 2 | 4.45 |
| | asters level | | $\frac{2}{2}$ | 4.45 |
| IVI | asters level | Total | 100.00 | 100.00 |
| Occupati | on | 10141 | 100.00 | 100.00 |
| | trepreneur | | 26 | 57.78 |
| | rmer | | 11 | 24.44 |
| En | nployed | | 8 | 17.78 |
| | | Total | 45 | 100.00 |
| | Gross Income | | | 51.11 |
| | oderately sufficient | | 23 | 51.11 |
| | ry sufficient | | 14 | 31.11 |
| Su | fficient | To401 | 8 | 17.78 |
| NT 1 | CX7 D '1 4 | Total | 45 | 100.00 |
| | of Years as President | | 10 | 42.22 |
| | oderately experienced | | 19 | · · |
| | perienced | | 18 | 40.00 17.80 |
| Ve | ery experienced | Total | 8 45 | 100.00 |
| Title of t | rainings attended (multi | | | 100.00 |
| | od processing | ore resp | 16 | 35.55 |
| | od safety | | 15 | 33.33 |
| | ckaging and labeling | | 10 | 22.22 |
| Pro | oduct positioning and pr | icing | 7 | 15.55 |
| Ba | mboo/wood | ., | _ | 15.55 |
| pro | ocessing/treatment | | 7 5 | 15.55 11.11 |
| Ot | ookkeeping hers (<i>Organic fertilizer</i> , | | 3 | |
| me | etals, feed formulation) | | 5 45 | 11.11 |
| | | Total | 45 | 100.00 |

private sector (Table 1). Favorably, majority of were entrepreneurs who engaged in small business or in the processing of a particular products. As leader of the community-based project, they are greatly involved in the processing and production of particular product approved for funding by DOST8.

With respect to the respondents' monthly income, fourteen (31 percent) exhibited very sufficient income (Php21,000 and above), eight (18 percent) had sufficient income (Php11,000 to 20,000) while 23 (51 percent) revealed to have moderately sufficient income (Php10,000 and below). This suggests that majority of the Association president have moderately sufficient income to meet the needs of their families and in financing other related activities. Income matters in leading an organization, as they need to coordinate with public and private agencies that could provide them with the assistance needed, deal with people who can assist them and maintain partnerships with co-partners.

As to the length of years being president of the Association, right (18 percent) were moderately experienced (1 year and below), 18 (40 percent) were having 2-3 years of experience and 19 (42 percent) were very experienced (4 years and above). This reflects that a large number of the respondents were very experienced who have been serving as president for four years and above. In one of the interviews conducted in Biliran province, a respondent reported that in the constitution and by-laws of the Association, it is indicated that election of officers shall be conducted during the general assembly every after two years, however, most of their officers are re-elected as such because they are voted again by the general assembly. Some respondents also believe that work experience is extremely important in understanding the organizational goals, mission and vision, and in dealing with the officers and members of the Association.

In a bid to enhance skill of people involved in the community-based project implementation in the region, the DOST8 conducts technology trainings to improve the required skills to become effective in the project operations. Technology trainings are conducted jointly with partner LGUs/SUCs in the locality where the project is located. Table 1 revealed that among the 45 respondents, sixteen (36 percent) have attended food processing, fifteen (33 percent) on food safety; ten (22 percent) on packaging and labelling, seven (15 percent) each on product positioning and pricing, and bamboo/wood processing/treatment. The least attended trainings were on bookkeeping and other trainings at five (11 percent) each. Result indicates that the most attended trainings sponsored by DOST8 are food processing, food safety and packaging and labelling which are vital in the processing of products made by community-based project beneficiaries, enabling them to have greater confidence in the project operations.

4.2 Profile of the regional program Coordinator (RPC) and the provincial science and technology Directors (PSTDs)

As reflected in Table 2, four (57 percent) of the regional program coordinators and provincial S&T directors are their middle age (31 to 50 years old) while three (43 percent) are above middle age (51 years old and above). This suggests that majority of the respondent RPG and PSTDS are in their middle ages. Out of the 7 respondents, four (57 percent) were are males while three (43 percent) were females. Indicatively, regardless of sex and age, Covey (2004) argued that organization leaders possess the four intelligences (spiritual, emotional, physical and intellectual), which are vital enabling attributes to understand the needs and aspirations of community-based project beneficiaries in the region.

By marital status, six (86 percent) were married while the remaining one was single (14 percent). Evidently, the majority were married. Vance (2006) argued that married employees tend to be more responsible and committed in working effectively and efficiently, possess better

understanding on the complexities of local communities, and encourage participation as a strategy in implementing programs that would meet the various needs of community-based project beneficiaries.

Table 2. Profile of regional program coordinators and provincial S&T directors

| Profile variable and indicator | Frequency | Percent (%) |
|--|------------------|-----------------------------------|
| Age Middle age Above middle age Total | 4 3 7 | 57.10 42.90 100.00 |
| Sex Male Female Total | 4 3 7 | 57.14 42.86 100.00 |
| Marital Status Married Single Total | 6 1 7 | 85.71 14.29 100.00 |
| Highest Educational Attainment PhD/DMT level Masters level College level Total | 4 2 1 7 | 57.14 28.57 14.29 100.00 |
| Family gross income Very sufficient | 7 | 100.00 |
| Number of years as RPC/PSTD Very experienced | 7 | 100.00 |

Four (67 percent) of the respondents reached in the doctoral level, while two (28 percent) reached masters level. Just one of the seven respondents was college level. This finding suggests that RPC/PSTDs were already equipped with the needed industry of competence to manage their respective organizations. The finding also suggests that other PSTDs may need to enrol in the graduate or post graduate studies. Accordingly, higher educational attainment is a plus factor for accelerated promotion and consequently higher salaries. Besides, higher education is believed to bring more efficiency in completing assigned tasks (Woolcock, 2001).

All of the seven RPC/PSTDs respondents exhibited very sufficient monthly gross income (Php31,000 and above). Since they were already holding senior managers position at DOST8, it follows that they have also higher monthly remuneration. In like manner, all of them were very experienced having worked at the Department for 4 years and over.

The finding denotes the relevance of work experience in understanding the organizational goals, mission and vision, which can be achieved through effective and efficient project management of DOST programs in the provinces. This further suggests that they have already undergone several trainings and engagements to become competent and effective leaders in their respective organizations in the provinces.

4.3 Extent of community-based project implementation

4.3.1 Pre-operation of community-based project

The conduct of coordination meetings among members of the Association with the concerned LGU, the PSTC/DOST8 and other stakeholders during pre-operation of community-based projects was confirmed to be very highly implemented. In like manner, the respondents also affirmed very high implementation of DOST8 financial assistance and its utilization based on approved funding.

Table 3. Extent of community-based project implementation during pre-operation

| Statement | Weighted Mean | Rank | Interpretation |
|---|------------------|-----------------|-------------------------|
| Coordination meetings were conducted among members of the association, LGU, SUC, PSTC/DOST8 and other stakeholders regarding the CB project to be implemented | 4.36 | 1 st | Very highly implemented |
| The amount of DOST8 financial assistance and its utilization based on line-item Budget (LIB) was made known to the association by the LGU/SUC | 4.30 | 2 nd | Very highly implemented |
| The association was already organized before DOST8 assistance | 4.28 | 3 rd | Very highly implemented |
| Technology Needs Assessment (TNA) was conducted by DOST8/LGU/SUC before providing assistance | 4.26 | 4 th | Very highly implemented |
| An orientation of provisions indicated in the Memorandum of Agreement (MOA) was conducted by DOST8 before the release of funds | 4.26 | 4 th | Very highly implemented |
| Availability of building as processing area/project site where purchased equipment is placed | 3.96 | 5 th | Highly implemented |
| The association is waiting for the equipment purchased by DOST8 to start the processing of the product | 3.88 | 6 th | Highly implemented |
| A technology training & equipment maintenance was conducted by DOST8/PSTC/LGU on the processing of the product using the purchased equipment | 3.57 | 7 th | Highly implemented |
| The project proposal approved for DOST8 funding was prepared by the LGU/SUC | 3.48 | 8 th | Highly implemented |
| Different working committees were created by the association/LGU/SUC for the processing of product/s from raw materials gathering to marketing | 3.48 | 8 th | Highly implemented |
| Grand weighted mean and overall interpretation | 3.98 | Highl | y implemented |

Mean Range Description Interpretation for extent of implementation

1.00 - 1.80Never observedNot implemented1.81 - 2.60Seldom observedSlightly implemented2.61 - 3.40Sometimes observedModerately implemented3.41 - 4.20Often observedHighly implemented4.21 - 5.00Always observedVery highly implemented

The Association had been informed by the concerned LGU/SUC. It was also noted that prior to DOST8 assistance, the Association was already organized, at the same time, there has been

very high implementation of TNA. The conducted of orientation on the provisions stipulated in the MOA was accomplished by the DOST8 before fund released thereby resulting to very high implementation of the said activity.

Other indicators were also rated with high implementation levels. These included the provision and availability of constructed processing areas/project site as repository of acquired equipment, conduct of technology training and equipment maintenance by the DOST8/PSTC/LGU on the processing of the product using the purchased equipment, the creation by the LGU/SUC of working committees for the processing of product/s from raw materials gathering to marketing. Overall, the extent of community-based project implementation during pre-operation (Table 3) has emerged highly implemented by the concerned stakeholders.

4.3.2 Operation of community-based project

Among the very highly implemented activities of community-based project during operation, as rated by the respondents, pointed out that the Association took the responsibility in product development while aggressively doing marketing and product promotion.

Table 4. Extent of community-based project implementation during operation

| Statement | Weighted Mean | Rank | Interpretation |
|---|------------------|------------------|-------------------------|
| The association takes responsibility in developing new product and in the marketing and promotion of product/s aggressively | 4.36 | 1 st | Very highly implemented |
| The association is responsible in the maintenance of equipment, supplies and materials ensuring availability when needed | 4.26 | 2 nd | Very highly implemented |
| The quality control of product is undertaken by the officers of the Association and staff assigned from LGU/SUC | 4.20 | 3 rd | Highly implemented |
| The LGU/SUC takes the responsibility in making the association aware of the project status/operation and activities based on the approved implementation period | 4.06 | 4 th | Highly implemented |
| There is a stable supply of raw materials, electricity & water to be used during the processing of the product | 3.93 | 5 th | Highly implemented |
| There is a great product demand and processing is made regularly | 3.86 | 6 th | Highly implemented |
| The LGU/SUC assigned a technician to assist the association in providing maintenance of the equipment | 3.66 | 7 th | Highly implemented |
| The processing of product is made based on orders only | 3.33 | 8 th | Moderately implemented |
| The association availed DOST8 consultancy services: MPEX, food safety, GMP, energy audit, etc. | 3.10 | 9 th | Moderately implemented |
| Assistance of DOST8 on packaging and labelling is already printed & utilized | 2.93 | 10 th | Moderately implemented |
| There are delays in equipment acquisition due to limited fabricators of equipment indicated, resulting to delays in the processing of the product | 1.90 | 11 th | Slightly implemented |

| There are delays in equipment acquisition due to bidding procedures/requirements | 1.80 | 12 th | Not implemented |
|--|------|------------------|-----------------|
| Grand weighted mean and overall interpretation | 3.65 | Highl | ly implemented |

| Mean Range | Description | Interpretation for extent of implementation |
|-------------|--------------------|---|
| 1.00 - 1.80 | Never observed | Not implemented |
| 1.81 - 2.60 | Seldom observed | Slightly implemented |
| 2.61 - 3.40 | Sometimes observed | Moderately implemented |
| 3.41 - 4.20 | Often observed | Highly implemented |
| 4.21 - 5.00 | Always observed | Very highly implemented |

In like manner, the Association exhibited very high implementation in the maintenance of equipment and always securing availability of supplies and materials like lubricants, oils, tools, fuel, among others when needed. There was high implementation on the quality control of product undertaken by the officers of the Association together with the personnel tasked by the local counterpart. The LGU/SUC took the responsibility in making the Association aware of the project status/operation and activities indicated in the proposal based on the approved implementation period. Stable supply of raw materials, electricity and water was ensured especially during regular product processing.

Accordingly, the LCU/SUC assigned a technician to assist in the maintenance of acquired equipment. On moderate implementation was the processing of products based on received orders. There was also moderate implementation on the availment of DOST9 consultancy services such as MPEX, food safety, GMP, energy audit, packaging and labelling for productivity improvement. However, there were minor delays in equipment acquisition due to limited fabricators of equipment indicated, resulting to delays in the processing of the product. This is traced back to existing fabricators of equipment in the region which are not accredited by DOST.

4.3.3 Monitoring of community-based project

The respondents affirmed that the DOST8/PSTC and concerned agencies highly implemented in keeping track and close monitoring the progress of equipment acquisition including other items indicated in the project LIB. Project visits were regularly conducted and highly implemented by DOST8/PSTC/LGU/SUC during project operation.

The LGU/SUC/Association regularly review the project activities based on approved project proposal to ensure meeting the project timeframe. The LGU/SUC/Association is aware that the allowable extension of project implementation period is only two years and the number of requests for the extension can only be done two times.

The finding reveals that the lenient checking of the book of accounts and late or failure in the submission of quarterly reports of the proponent LGU/SUC resulted to difficulty in the liquidation of availed DOST8 financial assistance. On the other hand, the respondents affirmed that the DOST8/PSTC and concerned agencies moderately implemented the checking the book of accounts of project beneficiary (LGU/SUC) and remind them of project implementation period based on MOA. Likewise, there was moderate implementation by the LGU/SUC on the submission of quarterly financial report and audited financial report (AFR) to DOST8 as a requirement indicated in the MOA.

Table 5. Extent of community—based project implementation during monitoring

| Statement Statement | Weighted Mean | Rank | Interpretation |
|--|------------------|-----------------|------------------------|
| The DOST8/PSTC & concerned agencies keep track and closely monitor the progress of equipment acquisition & other items indicated in the Line-item Budget of the project | 4.13 | 1 st | Highly implemented |
| Project visit is periodically conducted by DOST8/PSTC/LGU/SUC during project operation | 4.06 | 2 nd | Highly implemented |
| The LGU/SUC/association regularly review the project activities based on approved project proposal to ensure meeting the project timeframe | 3.83 | 3 rd | Highly implemented |
| The LGU/SUC/association is aware that the allowable extension of project implementation period is only two years & the number of requests for the extension can only be done two times | 3.80 | 4 th | Highly implemented |
| DOST8/PSTC & concerned agencies check the book of accounts of project beneficiary (LGU/SUC) and remind them of project implementation period based on MOA | 3.26 | 5 th | Moderately implemented |
| The LGU/SUC submits quarterly financial report and Audited Financial Report (AFR) to DOST8 as a requirement indicated in the MOA | 2.76 | 6 th | Moderately implemented |
| Grand weighted mean and overall interpretation | 3.64 | Highly | implemented |

| Mean Range | Description | Interpretation for extent of implementation |
|-------------|-------------|---|
| Wican Kange | Description | interpretation for extent of implementation |

| | _ | * | * |
|--------|------|--------------------|-------------------------|
| 1.00 - | 1.80 | Never observed | Not implemented |
| 1.81 - | 2.60 | Seldom observed | Slightly implemented |
| 2.61 - | 3.40 | Sometimes observed | Moderately implemented |
| 3.41 - | 4.20 | Often observed | Highly implemented |
| 4.21 - | 5.00 | Always observed | Very highly implemented |

4.3.4 Evaluation of community-based project

As presented in Table 6, the President-respondents noted high implementation on the initiatives geared towards increasing sales, production and augmenting employment of the Association after DOST8 assistance. The Inspection Committee of DOST8 also highly implemented the conduct of inspection of the purchased equipment tagging them as DOST8 property. It was also confirmed that the Association is knowledgeable on product pricing, positioning, promotion of the products being produced, resulting to increased production and sales.

In like manner, during the project evaluation, it was proven that the concerned agencies and the Association already accomplished the expected output of the project based approved timeframe. Accordingly, the acquisition of equipment needed for the production was made on time as highly implemented by the LGU/SUC based on approved LIB.

Meanwhile, only a moderate implementation was achieved with respect to the purchase of some equipment with indicated project activities in the proposal not yet undertaken. In this regard, there was felt need need to extend project operation. This finding also suggests that there is a need to revisit the GIA guidelines to avoid future inefficiencies in community-based project implementation.

Table 6. Extent of community-based project implementation during evaluation

| Table 0. Extent of community-based project implementation during evaluation | | | |
|---|--|--|--|
| Weighted Mean | Rank | Interpretation | |
| 4.16 | 1 ct | Highly | |
| 4.16 | 130 | implemented | |
| 4.00 | and | Highly | |
| 4.00 | 2 | implemented | |
| 4.00 | and | Highly | |
| 4.00 | 2 | implemented | |
| | | | |
| 2.02 | ard | Highly | |
| 3.93 | 3.0 | implemented | |
| | | 1 | |
| | | III alala | |
| 3.53 | 4 th | Highly | |
| | | implemented | |
| | | III alalas | |
| 3.46 | 5 th | Highly | |
| | | implemented | |
| | | | |
| 2.26 | c th | Moderately | |
| 3.20 | 0 | implemented | |
| | | - | |
| 2.30 | 7th | Slightly | |
| 2.30 | 7 | implemented | |
| 3.58 | Highly | Implemented | |
| | Weighted Mean 4.16 4.00 4.00 3.93 3.53 3.46 2.30 | Weighted Mean Rank 4.16 1st 4.00 2nd 4.00 2nd 3.93 3rd 3.53 4th 3.46 5th 3.26 6th 2.30 7th | |

Mean Range Description Interpretation for extent of implementation

1.00 - 1.80 Never observed
 1.81 - 2.60 Seldom observed
 2.61 - 3.40 Sometimes observed
 3.41 - 4.20 Often observed
 4.21 - 5.00 Always observed
 Not implemented
 Moderately implemented
 Highly implemented
 Very highly implemented

4.4 Status of operation of community-based projects after availing the DOST8 financial assistance

4.4.1 Financial status of community-based project beneficiaries

The study respondents' rating confirmed often observance of initiated activities with respect to the financial status of community-based beneficiaries (Table 7). The beneficiaries were always informed regarding the financial status of the Association. They also noted that the Association has sufficient knowledge on bookkeeping, and recording of income and expenses were properly maintained.

As often observed, the Association maintained sufficient working capital to produce more products and sustain its operations. Meanwhile, the respondents acknowledged to have sometimes observed about the Association availing loans from financing institutions. This goes to say that the Association practice prudence in its financial management minimizing chances of incurring loans.

Table 7. Financial status of community-based project beneficiaries

| Tuble 7.1 maneral status of community based project beneficiaries | | | |
|---|------------------|-----------------|--------------------|
| Statement | Weighted Mean | Rank | Description |
| The association always inform its members regarding the financial status of the group | 4.16 | 1 st | Often observed |
| The association has sufficient knowledge on bookkeeping and maintained proper recording of income and expenses | 4.03 | 2 nd | Often observed |
| The association has sufficient working capital to be able to produce more products and continue its operation | 3.96 | 3 rd | Often observed |
| The association has availed loan from financing institutions or from the government for financial assistance aside from DOST8 | 2.70 | 4 th | Sometimes observed |
| Grand weighted mean and overall description | 3.71 | Ofte | en observed |

| Ranges for the weighted mean | Description |
|------------------------------|--------------------|
| 1.00 - 1.80 | Never observed |
| 1.81 - 2.60 | Seldom observed |
| 2.61 - 3.40 | Sometimes observed |
| 3.41 - 4.20 | Often observed |
| 4.21 - 5.00 | Always observed |

This finding may imply that Associations are capable of running the group as they have sufficient working capital, have knowledge on bookkeeping and inform the group members on the financial status of the Association. Results also suggests that community—based project beneficiaries utilize "efficient organizational communication which involves knowing how to create and exchange information work" (Wrench and Punyanunt-Carter, 2012) with "diverse groups or individuals, communicate in complicated and changing circumstances, as well as having the aptitude or motivation to communicate in appropriate manners" (Shockley-Zalabak, 2014).

4.4.2 Marketing status of community-based project beneficiaries

As often observed by the respondents, the Association has peddlers who market its products. It was also able to collect its receivables on time. It was also confirmed that the Association is able to meet the delivery dates of products as agreed with the costumers.

However, participation in DOST8 sponsored fairs, exhibits and other government agencies, as avenues for product promotion, was sometimes observed only. This may indicate that the beneficiary groups need further attention from the private and public sectors to assist them in their marketing needs. Marketing needs may include attendance to fairs and exhibits, need to establish display center/s, promotion of products in the internet, and packaging and labeling of the product is important, all these are intended to widen their market share, update the public of their product/s and become updated on the market information of the product/s they are producing.

DOST8 assistance on the packaging and labeling of existing products was sometimes observed, the same hold true for the existence of display center(s) for product displace and sales. Not all the time that the Association has available website to market and promote its products online. There is really a need to extend assistance to the Association in this context.

Table 8. Marketing status of community-based project beneficiaries

| Statement | Weighted Mean | Rank | Description |
|--|------------------|--------------------|--------------------|
| The association has peddlers for the marketing of products and collect receivables on time | 3.83 | 1 | Often observed |
| The association meet the delivery dates of products as agreed with the costumers | 3.66 | 2 | Often observed |
| The association has participated in fairs and exhibits sponsored by DOST8 & other government agencies to promote the product | 3.26 | 3 | Sometimes observed |
| The association is still waiting for the approved design for packaging & labelling assistance with DOST8 | 3.22 | 4 | Sometimes observed |
| The existing packaging & labelling of the product is DOST8 assisted | 2.93 | 5 | Sometimes observed |
| The association has a website to market and promote the product in the internet | 2.83 | 6 | Sometimes observed |
| The association has display center/s where product/s can be sold | 2.63 | 7 | Sometimes observed |
| Grand weighted mean and overall description | 3.19 | Sometimes observed | |

| Ranges for the weighted mean | Description |
|------------------------------|--------------------|
| 1.00 - 1.80 | Never observed |
| 1.81 - 2.60 | Seldom observed |
| 2.61 - 3.40 | Sometimes observed |
| 3.41 - 4.20 | Often observed |
| 4.21 - 5.00 | Always observed |

4.4.3 Production status of community-based project beneficiaries

The responses pointed out always observance with respect to availability of appropriate tools and equipment needed during product processing. This confirmed to the situation where raw materials are readily available for processing of the product despite devastation of typhoon Yolanda in 2013 indicating that the purchased equipment from DOST8 funds are still functional and serviceable notwithstanding the havoc the typhoon caused to the industry in the region. This also reflect that members and officers of the Association are knowledgeable on equipment troubleshooting.

During the last six months, with reference to the interview period, the respondents sometimes observed high operational expenses, i.e. electricity, water and cost of equipment maintenance. Per interview with one of the respondents in Eastern Samar who is producing cassava cake, she emphasized that they still pay the minimum energy consumption for the last six months while using the equipment acquired from DOST8 financial assistance.

Result implies that raw materials, tools and equipment, and other resources needed to produce the product are available when used. The response of the respondents is associated with the concept on production stressed in the book of production and operations management, which states that production is the heart of the manufacturing or processing of the product. As Kumar and Suresh (2008) noted, "production is the step-by-step conversion of one form of material into another form through chemical or mechanical process to create or enhance the utility of the product to the user"

Table 9. Status of production of community-based project beneficiaries

| Statement | Weighted Mean | Rank | Description |
|---|------------------|-----------------|--------------------|
| The appropriate tools and equipment needed are available during processing of product | 4.23 | 1 st | Always observed |
| The purchased equipment from DOST8 funds are still functional/serviceable | 4.13 | 2 nd | Often observed |
| The raw materials are available for the processing of the product despite devastation of typhoon Yolanda | 3.96 | 3 rd | Often observed |
| There are members/officers who are knowledgeable on equipment troubleshooting | 3.70 | 4 th | Often observed |
| There is high operational expenses incurred for the last six months (example: electricity, water & cost of equipment maintenance) | 3.03 | 5 th | Sometimes observed |
| Grand weighted mean and overall description | 3.81 | Ofte | en observed |

| Ranges for the weighted mea | an Description |
|-----------------------------|--------------------|
| 1.00 - 1.80 | Never observed |
| 1.81 - 2.60 | Seldom observed |
| 2.61 - 3.40 | Sometimes observed |
| 3.41 - 4.20 | Often observed |
| 4.21 - 5.00 | Always observed |

4.4.4 Personnel/organization status of community-based project beneficiaries

Depicted in Table 10 is the status of personnel/ organization of community based project beneficiaries after availing financial assistance from DOST8. As always observed, the Association has skilled and well trained members knowledgeable in the processing of the product. Conduct of regular meetings to settle problems and provide updates on project operation was often observed. As it sometimes happened, the Association would request project extension about three months prior to termination of approved project timeframe, the same hold true for requests of LIB realignment three months before the end of project implementation.

Table 10. Status of personnel/organizational of community-based project beneficiaries

| Statement | Weighted Mean | Rank | Description |
|---|------------------|--------------------|-------------|
| The association has skilled & well trained members | 4. 50 | 1 st | Always |
| knowledgeable in the processing of the product | | | observed |
| Regular meetings are conducted regularly to settle | 4.13 | 13 2 nd | Often |
| problems and provide updates on project operation | 4.13 | 4 | observed |
| The LGU/SUC/association requested extension in the | | | Sometimes |
| project implementation period three months before the | 3.30 | 3^{rd} | observed |
| end of the approved project timeframe | | | observed |
| Changing leadership in the association has affected the | 3.16 | 4 th | Sometimes |
| project operation | 5.10 | 4 | observed |
| The association had temporarily stopped operation | | | Sometimes |
| since the occurrence of typhoon Yolanda on | 3.06 | 5^{th} | |
| November 2013 | | | observed |

| The LGU/SUC had already requested re-alignment of the LIB three months before the end of project implementation | 2.80 | 6 th | Sometimes observed |
|---|------|-----------------|--------------------|
| At times, there is non-availability of workers during production due to family related problems | 1.77 | 7 th | Never Observed |
| The DOST8 financial assistance is already beyond its approved project timeframe | 1.50 | 8 th | Never observed |
| Grand weighted mean and overall description | 3.58 | Often observed | |

| Ranges for the weighted mean | Description |
|------------------------------|--------------------|
| 1.00 - 1.80 | Never observed |
| 1.81 - 2.60 | Seldom observed |
| 2.61 - 3.40 | Sometimes observed |
| 3.41 - 4.20 | Often observed |
| 4.21 - 5.00 | Always observed |

Effect of project operation due to changing leadership in the Association has been observed for sometimes only. Only few Association had temporarily stopped operation due to typhoon Yolanda damage. It was never observed the workers would be not available during production due to family related problems. In the same way that no observance of DOST8 financial assistance have gone beyond its approved project timeframe.

5. Conclusion and Recommendations

In the light of the study findings, it is concluded that the Associations are in operational status and sustainable, availed sufficient financial assistance from DOST8. The Regional Program Coordinator and the Provincial S&T Directors have attained DMT studies or DM graduate, hence very experienced. The implementation of community-based projects conformed to the required processes and activities during project pre-operation, project operation, project monitoring and project evaluation. The preparation of pre-operation stage proposals is done by the PSTCs. Attendance to fairs and exhibits, establishment of display centers are not always implemented. Online accessibility of the products is not yet stable the year-round.

Grounded on the findings and conclusion of the study, the researcher recommends that community-based project beneficiaries should contribute in the preparation of project proposals through the community life competency program (CLCP). Intensive monitoring on the status of released project funds, acquisition of equipment need to be effected. Qualified Association and community-based project beneficiaries must enroll with MPEX, Food Safety, GMP, CPT and Energy Audit to enhance productivity and gain knowledge and insights on project operations. A community-based project based project implementation guidelines for DOST8 may be formulated and a review of the provisions indicated in the memorandum of agreement for proponent LGU and SCU may be conducted. Related studies may be conducted focusing on the impact of community-based projects to Associations beneficiaries utilizing other variables not covered in this study.

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