IMPLEMENTATION OF EXTENSION SERVICES IN SELECT STATE UNIVERSITIES AND COLLEGES IN THE PHILIPPINES

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ABSTRACT. *This study was conducted to explore the nature of extension services in select state universities and colleges (SUCs) in the Philippines. Considered as the "third mission" of higher education institutions, extension service allows the institution and its faculty members to share their respective expertise to the community aside from the students who are enrolled in the programs. The study determined the nature of extension programs, projects and activities conducted by select state universities and colleges and the problems encountered in the implementation of extension services. A total of 13 SUCs participated in this study with 61 respondents which include the Directors of the Extension Unit, faculty-extensionists and extension office staff. The gathered data revealed that most of the extension services implemented by SUCs from 2016-2018 are integrated community extension programs that ran for 2-5 years. Stand-alone extension projects and activities were also conducted which are mostly technical skills training or capability –enhancement trainings. A number of challenges encountered in the four stages (preparation, implementation, monitoring and evaluation) of conducting extension services were identified and suggestions to address such are discussed. It is hoped that with the results of this study, SUCs realize strategies to address relevant problems and issues, and thereby improve their extension services to the maximum.*

Keywords: Extension services, state universities and colleges

1. INTRODUCTION

State Universities and Colleges (SUCs) in the Philippines are mandated to perform a trilogy of functions which include instruction, research and extension services. Instruction, considered as its primary function deals with the delivery of the knowledge and skills to the students [1]. Research, on the other hand, deals with the development of new theories and practices to be used by the university and society. The role of higher education in research has been highlighted in CMO No. 46, s. 2012, that is, *"to provide focused support to the research required for technological innovation, economic growth and global competitiveness, on the one hand, and for crafting the country's strategic directions and policies, on the other"*.

CMO No. 46, s. 2012 stipulates that one of the missions of the Philippine Higher Education system is to help improve the quality of human life of Filipinos, respond effectively to changing societal needs and conditions; and provide solutions to problems at the local community, regional and national levels. With extension service as a core function of universities and colleges, measures or indicators on the extent and efficiency of delivery of extension services has been included in the various assessment for state universities and colleges, such as in SUC Levelling, the Annual Major Final Outputs of SUCs, the Institutional Sustainability Assessment of CHED, Institutional and Program Accreditation of the Accrediting Agency of Chartered Universities and Colleges (AACCUP).

The directive to do extension services is not only true to higher education institutions in the Philippines. The contributions of universities to society have become a key element in the mandate of universities in the world, in addition to education and research, the universities are expected to have a 'third mission' expressing how it relates (or wants to relate) to society [2].

This study focuses on the extension service function of the SUCs in the Philippines. From a wider perspective, this function of public institution of higher learning cannot really isolate itself from the other two. Extension service allows the institution and its faculty members to share their respective expertise to the community aside from the students who are enrolled in the programs. Extension service is likewise the venue through which the products of

research and innovations are converted into goods and services that contribute to the socio-economic development of the community in particular and the country in general. This is the most practical way by which a public institution can fulfill its accountability to the taxpayers.

The results of the study are significant to all the stakeholders of the SUCs' extension services, including the Philippine Association of State Universities and Colleges (PASUC) and its member institutions. The findings of the study can be a useful guide to the SUC administrators in the design and implementation of their respective extension programs. Insights derived from this study may also be useful to AACCUP in revisiting its standards and instruments for the evaluation of the extension service in the accreditation of SUCs' programs.

The inquiry is conducted considering the wide spectrum of extension services that may be planned and implemented by SUCs. Its chief purpose is to explore the effectiveness of implementation of the extension services in SUCs in the Philippines. It claims that from the results, the SUCs will realize on addressing relevant problems and issues, and thereby improve their extension services to the maximum.

2. BRIEF LITERATURE
Extension Services Defined

"Extension" is not a term which can be precisely defined, but one which describes a continual and changing process in rural areas [3]. The term "extension" was coined from an educational development in England during the nineteenth century when two ancient universities of Oxford and Cambridge discussed about how they could serve the educational needs of the rapidly growing populations in the industrial, urban area outside the university premises [4].

One proposed definition is: *"Extension is a series of embedded communicative interventions that are meant, among others, to develop and/or induce innovations which supposedly help to resolve (usually multi-actor) problematic situations [5]*. This definition is more generic in form as it did not particularly mention the kind of services to be provided.

The Commission on Higher Education (CHED) in the Philippines, defined extension services as an *"act of communicating, persuading, and helping specific sectors or*

target clienteles to enable them to effectively improve production, community and/or institutions, and quality of life" [6], and later defined as the *"systematic transfer of technology, innovation or information generated by HEIs and its partners to seek solutions to specific developmental concerns"* [7].

Extension services has also been associated to terms such as knowledge transfer, technology transfer, community services, community outreach or community engagement. A study on 31 university cases in various part of the world, showed that knowledge transfer in practice is still mainly identified with the university's relationships with industry, while engagement is mainly identified with community (or social) development, services, and impact [2].

Extension Services in State Universities and Colleges in the Philippines

A study to determine the construct of extension from the university faculty perspective indicated that the respondents perceived the nature of extension as "service", which means that the involvement of the school to the community is limited, or only when a need occurs [8]. In terms of university extension, the participants felt that it is already engaged and that the extension activities are responsive, respecting partners, academically neutral, accessible, integrated, and coordinated, except for resource partnership.

Another study on the community engagement of State Universities and Colleges in the Philippines and identified some issues and challenges of SUCs in establishing community engagement which includes low faculty motivation, extension services as a second rate endeavor to research, multiple responsibilities and functions of faculty members and absence or low budget for research and extension [9].

An assessment on the community extension services of SUCs in Region IX along education, livelihood generation, health and nutrition, good governance and environmental awareness during the School Year 2008-2009 was conducted form as a basis for sustainable community enhancement program. This study gathered information from faculty members and extension service beneficiaries [10]. The results of the study revealed that the extension program of SUCs was well implemented with good involvement from faculty and students. Furthermore, the top three challenges encountered by extensionists were found to be unavailability of vehicles, limited incentives to extension service implementers and insufficiency of materials and tools for better learning process.

Another study conducted in SUCs aimed to determine the research and extension participation, performance and motivation of the faculty members of Leyte Normal University [11]. The results of the study revealed that majority of the respondents got only satisfactory level of participation and performance in research and extension while most of them strongly agree on the statements on intrinsic and extrinsic motivations. Lack of time came out the number one problem encountered by the respondents in conducting research and extension programs, projects and activities. Also, majority of the respondents identified proper time from among the suggested solutions on problems encountered in the conduct of university's research and extension program, projects and activities.

3. METHODOLOGY

The study employed mixed methods of research. Select Level III and Level IV SUCs per the 2016 SUC Levelling evaluation were chosen to be part of this study. It is based on the assumption that Level III and IV SUCs have developed their extension programs as a component of the R&D function of the institution; hence, they are already in the position to share reliable information on this matter.

A total of 61 respondents from the 13 SUCs participated in the study. Of the 61 respondents, 12 are Directors of the extension services division of the SUCs, 39 are faculty-extensionists and 10 are non-teaching staff. The respondents' age ranged from 24 to 63 years with an average of 44. The respondents have served the SUCs from 1 to 40 years with an average of 9 years.

Primary data and information about the SUCs' extension implementation were gathered through questionnaires. Two sets of questionnaires were developed, one for the head of units of the extension services division (usually a Director) and another one for the faculty-extensionists and/or extension staff. These instruments were subjected to face and content validation by experts (expert in the discipline, content expert, data analyst, and grammarian). Further, said instruments were also pilot tested to three SUCs (not part of the study). The final survey questionnaires were revised based on the suggestions of the respondents during the pilot testing.

Methodological triangulation were also utilized such as documents, interviews, and observations. Researchers visited the SUCs, conducted interviews with the Directors and focus group discussion on the faculty-extensionists and extension staff.

Prior to data gathering, the research proposal was submitted for Exempt Research certificate to one of the accredited Research Ethics Review Committee of the Philippine Council for Health Research and Development. After the certificate was granted, data gathering commenced.

After data were gathered, analysis and interpretation of quantitative data was conducted using appropriate statistical technique. The demographic profile of the respondents was summarized using descriptive statistics. In the analysis of qualitative data, a computer assisted qualitative data analysis software (CAQDAS) was used, particularly the NVivo. Following the thematic analysis approach, the auto-code feature of the NVivo software was utilized to organize dataset content into theme nodes. The results of the auto-code process were then further explored to establish meaningful themes. The contents of the nodes were reviewed and double-checked. Nodes associated with each other were combined in the final themes.

4. RESULTS AND DISCUSSION

What are the projects and activities included in the extension services programs of SUCs?

Respondents were asked a list of extension programs, projects and/or activities (PPAs) considered as extension services in their universities for three years (2016-2018). A total of 68 extension PPAs were shared by the respondents, 34 of these are integrated programs implemented or to be implemented for more than 2 years and the rest are stand-alone projects/activities. These integrated extension programs implement a range of schemes such as skills training, livelihood, and/or technology transfer. One example of the integrated extension program is Project BISLIG of The University of Southeastern Philippines.

BISLIG stands for Barangay Integrated Strategies to Improve Land and Water Resources Management for Inclusive Growth. This program provided smallholder tree farmers and fisher folks in the area with a social, economic, and political empowerment platform to enhance their livelihood and wellbeing. Using science and technology interventions developed by USeP, Project BISLIG also endeavors to enhance adopters' political capabilities and leadership and financial literacy skills.

Some SUCs partner with external agencies in delivering the latter's programs through the extension services units of the SUCs. In fact, of the 34 extension programs of the SUCs, 15 are externally-funded. The funding agencies include the Department of Social Welfare and Development (DSWD, Bureau of Fisheries and Aquatic Resources (BFAR) - Department of Agriculture (DA), Department of Agriculture-Agricultural Training Institute (DA-ATI) and the Department of Agrarian Reform (DAR) among others. It was also found out that there are stand-alone extension projects and activities of the SUCs (n=34). These projects and activities are not anchored on extension programs and most are based on requests from external agencies or demand-driven. Extension programs of SUCs were also categorized as demand driven or accreditation driven [10]. Demand driven extension service is usually requested by the Local Government Unit having identified the specific functional needs of their constituents for the establishment and promotion of the populace' general well-being. On the other hand, accreditation driven extension programs are implemented in response to the requirements by an accrediting body.

More than one-half of these projects or activities conducted by SUCs are technical skills training (n=18, 53%) such as food processing, bread and pastry production, food and beverage services, basic driving, engine troubleshooting and dishwashing liquid making. There were also professional development trainings conducted such as competency enhancement training for teachers. There were also tutorials given to children and high school students.

The gathered data also revealed the beneficiaries of extension PPAs of SUCs include (among others) out of school youths, LGU employees, farmers, fisherfolks, parolees and probationers, women, professionals such as teachers, indigenous people, students and children.

It is worthy to note that all of these reported projects or activities, although not under a particular program, were conducted with Memoranda of Agreement (MOA) with partner agencies. Some of these projects and activities (n=8, 24%) are externally funded. Furthermore, it was found out that these extension activities are anchored on the academic programs of the SUCs.

While the collected data on extension PPAs are not conclusive of the state of extension services for all state universities and colleges in the country, they reveal a clear picture of how SUCs understand and approach extension services. The concept of extension is open to a wide variety of interpretations because it is evolving as a result of tradition and policy context which is reflective of institutional goals [8].

It has been pointed out that extension should be the application or use of the research findings of an academic institution and he stressed that research and academic extension are twin and inseparable concept [12]. For this study, the interview with the Directors of extension services revealed that not all extension projects implemented were research-based. However, there is no uniform extension service delivery model. A model may be top-down, technology-driven extension system, just like general agricultural extension service model or a decentralized (bottom-up), market-driven extension system [13].

To what extent are the extension projects or programs effective in the delivery of services?

For this study, the extensionists were asked to rate the extent of effectiveness of the extension services delivery based on their perception. The result is presented in Figure 1. Most of the respondents (n=31, 51%) rated the effectiveness of the programs or projects to a great extent, that is 75% of the programs and project services were delivered. The other 15 (24.5%) felt that only 50% of the programs or projects were delivered while the other 15 (24.5%) believed that the programs/projects were fully delivered.
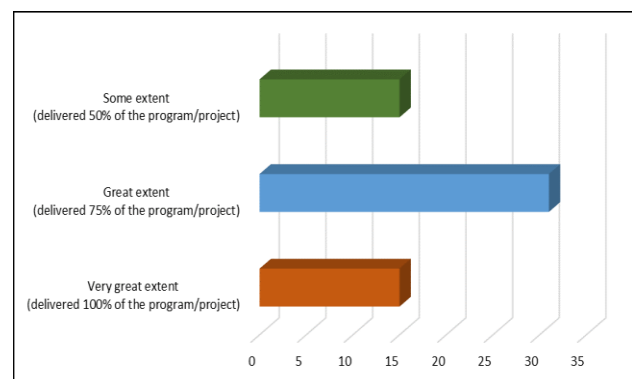

Figure 1. Extent of extension programs/projects' effectiveness based on the respondents' perception

According to the respondents, the beneficiaries evaluate their service delivery in terms of quality, timeliness and relevance of services delivery. However, extensionists expressed a number of concerns in the evaluation of their programs or projects. One of which is the design of the evaluation instrument. Some respondents conveyed that the evaluation were conducted right after the extension training or activity, an evaluation of the outcomes or the impact are sometimes not carried out, due to time, budget and transportation constraints. When the respondents were asked to tick the evaluation model/s used in their respective extension programs or projects, the results revealed that the majority of them use an objectives-based model (n=28, 46%) and the input-process-output model (n=16, 26%). Other evaluation model that they use include the context-input-process-product (CIPP) model and the analysis-design-development-implementation-evaluation model. Thirty-three percent (n=20) of the respondents, however, did not tick or write any evaluation model used for their programs/projects.

Another challenge encountered by extensionists is the lack of cooperation of the beneficiaries. Some evaluation forms are not returned and there are times when the beneficiaries or participants cannot be reached anymore. Both of these evaluation challenges were discussed [14] stating that some stakeholders of extension programs are not too enthusiastic about evaluating their extension programs. The reasons for the resistance include distrust or criticism of others' intentions, motivations, competency, or adequacy of effort or fear of the change that the evaluation might precipitate

and that evaluation is an additional task to a hectic workload.

The extent of implementation of the extension programs and services of SUCs in Region IX in the areas of along education, livelihood generation, health and nutrition, good governance and environmental awareness has been explored and the results showed that extension implementers and beneficiaries believed that the programs on all areas were "well-implemented" and that there was no significant difference on the ratings of the implementers and beneficiaries along all areas [10].

What are the problems encountered by SUCs during project preparation, implementation, monitoring and evaluation?

The respondents were asked to write down problems they have encountered during the four stages of working on their extension projects: preparation, implementation, monitoring and evaluation. Respondents were allowed to list as many problems that they can identify. The responses were analyzed using the auto-code feature of the NVivo software for each stage. The auto-code process suggested a number of theme nodes but after further exploration, some of the themes were combined to establish meaningful themes and sub-themes were also identified. The top two (2) problems summary of the results are presented in table 1.

Problems encountered by SUCs during the preparation stage. There were a total of 51 responses on the problems encountered by extensionists in the conduct of extension projects and the primary challenge reported is the hectic schedule of the faculty members who serve as extensionists or experts. The respondents put forward that faculty members are sometimes overwhelmed with a number of tasks aside from 15-24 actual teaching units aside from teaching-related activities such as lesson preparation, developing assessment tools and grading student work. Teachers are also expected to do research and serve as workforce in various activities such as accreditation. The teachers' workload has been expressed as a problem of faculty members in the conduct of extension services. The multiple responsibilities and IPCR targets could be one of the reasons why faculty members are not motivated to do extension [9]. On the research and extension participation, performance and motivation of the faculty members of the Leyte Normal University, lack of time came out the number one problem encountered by the respondents in conducting research and extension programs, projects and activities [11].

Even in other countries, there are obstacles encountered in balancing education, research and extension work. The attitudes of university-level research scientists toward educational and outreach activities relevant to their scientific endeavors were evaluated and the results indicated that while some research scientists value their education and outreach activities, many encounter obstacles to such efforts [15]. These hurdles include a lack of support or resources at their own universities, the effort required to balance their research careers and outreach activities, and needing to find ways to connect with a nonscientific audience.

Table 1. Problems encountered by SUCs in the conduct of extension services

Themes	Frequency	Percentage
Preparation stage (Total number of responses: 51)		
o Hectic schedule of faculty-extensionists/ experts	15	29%
o Difficulty in crafting proposals or sustainability plans	14	27%
Implementation Stage (Total number of responses: 61)		
o Conflicting schedules of both participants and faculty-extensionists	19	31%
o Procurement issues	19	31%
Monitoring stage (Total number of responses: 42)		
o Unavailability of monitoring team	21	50%
o Unavailability of beneficiaries/ participants	8	19%
Evaluation Stage (Total number of responses: 22)		
o Lack of cooperation from participants	9	41%
o No established evaluation system	6	27%

Another difficulty faced by the respondents is on crafting proposals. Some of the respondents expressed that they lack the capability of writing extension proposals. Among the functions of universities in the country, extension is the least acted upon by faculty members possibly because of some factors which include the lack of the necessary skills in community development aside from the lack of time for such endeavors and/or lack of understanding on what extension really is [16].

Faculty extensionists also encounter difficulties in coordinating with partner agencies and/or beneficiaries. In particular, the expectations set by the different parties sometimes are not aligned. Sometimes, the project doesn't seem to answer the particular need of a community, especially in the absence of baseline data through research studies or needs assessment. It is sometimes difficult to set schedules for the planning and even during implementation, not particularly because of the partners but because of the multiple functions of the faculty extensionists.

Problems encountered by SUCs during the implementation stage. In the implementation of extension services, the respondents still see the schedule as a concern. Even when the schedules were already set in the proposals and in the Memoranda of Agreement, other activities would come sometimes come up for both parties. In some instances, only few participants would attend the activities. At times, the change of schedule is caused by the delay of procurement of necessary resources for the extension activity. Aside from the delay of procurement of needed supplies and materials, the lack of budget restricts the implementation of extension services due to unavailable resources.

Moreover, the faculty members also expressed that transportation has been a challenge, especially in hard to reach communities. Of the 13 SUCs, only 5 have single dedicated vehicle for extension services. There are instances where the extensionists would spend their own money to get to their target communities.

The implementers of the community service in one study also presented problems like funds, location and the logistics [17]. Furthermore, unavailability of transportation was found to be the number one problem extensionists experience followed by the non-provision of incentives for extension implementers, insufficient materials and tools and that the partners do not perform the responsibilities set forth in the MOAs [10].

Problems encountered by SUCs during the monitoring and evaluation stages. Extension implementers seem to have similar problems encountered in the monitoring and evaluation of extension programs and projects. In some SUCs, the extension implementers also compose the monitoring and evaluation team. With this being said, the multiple functions of the faculty members is an obstacle to perform monitoring and evaluation of the extension service. Adding to the difficulty is the lack of a monitoring or evaluation system, that is, the process of monitoring and evaluation is sometimes unclear to the team. Logistics was also a concern especially on transportation. Monitoring and evaluation would require the team to go back and forth to the partner communities and just like during implementation, the monitoring team would have to travel and spend on their own for the lack of available vehicles from their home institution. Furthermore, tracking down the participants of the programs or projects also pose a challenge to the monitors and evaluators. One respondent even felt that the participants are not interested to participate in monitoring and evaluating the projects.

What are the stakeholders' suggestions to resolve the difficulties met in the project implementation?
The faculty extensionists presented a number of problems they encountered in the different stages of the conduct of extension services. With these problems, they posed some suggestions to address the difficulties.

As found out in this study, faculty members are usually very busy schedule of faculty members considering the multiple functions they perform. Along with the hectic schedule, the faculty-extensionists also lack the motivation to do extension services. When asked how to possibly solve the issue, some of the respondents' suggested the reduction of teaching loads or providing teaching load equivalent. As gathered in this study, some SUCs already provide an equivalent of 1.5-3 units depending on the scope of the extension program, project or activity. In some SUCs, however, the extensionists are provided with honoraria for their extension work. Unfortunately, there are faculty members who pronounced that they do not receive any incentive for their extension services, except for externally-funded projects. In anotehr study, majority of the respondents identified proper time from among the suggested solutions on problems encountered in the conduct of university's research and extension program, projects and activities to address the problem on time[11].

On the problem of crafting proposals, the respondents expressed the need to capacitate the extensionists on extension proposal writing through trainings or mentoring to provide the necessary knowledge and skills to extension service implementers.

In order to be assured of full cooperation from partners and/or beneficiaries, some respondents suggest forging a memoranda of agreement (MOA) which outlines the agreed duties and responsibilities of each party, so that expectations will be made clear to all the parties involved.

In the implementation of extension services, some respondents' suggested good time management to the problem on the schedule. Time management includes early submission and approval of proposals, proper coordination with the partners that includes the signing of a MOA, and following religiously the duties and responsibilities assigned to the involved parties. Moreover, hiring of full-time extension workers are also suggested. As revealed in this study, the extension function of the SUCs rely heavily on the faculty members who mostly have full teaching loads. For some SUCs, the faculty members conduct the needs analysis, write the proposals, implement the extension program or project, monitor and evaluate the program after implementation. With full-time extension workers in the university, faculty members may simply be tapped as experts for extension services.

On the procurement issues, some respondents suggest that individual SUCs establish a mechanism to expedite procurement process with compliance to the government rules and guidelines. Another simple way to tackle the concern is early submission of required documents for procurement and continuous follow-up with concerned personnel or offices.

Transportation has also been a challenge for the faculty members and they suggested that SUCs establish a better system for vehicle reservation and use. If the budget and other resource can warrant, they are strongly suggesting that a dedicated vehicle for extension services be provided by the university.

Extension implementers seem to have similar problems encountered in the monitoring and evaluation of extension programs and projects. The multiple functions of the faculty members have consistently been a challenge for extensionists in the various stages of conducting extension services. Thus, the same suggestion of time management and prioritization of functions and activities has been suggested. Furthermore, the establishment of a monitoring and evaluation team under the extension services unit of the university was suggested.

One of the suggestions of the respondents is to develop an evaluation framework. There are a number of literature providing extension services evaluation framework [5, 13] but most of these are on agricultural extension services. One important thing for evaluation is that the program or project manager (or leader) establish desired outcomes at the outset of a program, project, or policy [13]. It is necessary therefore that in crafting the proposal for extension services, the desired outcomes are already settled or agreed upon by the stakeholders.

5. CONLUSION AND RECOMMENDATIONS
Based on the results of the study, the following conclusions are hereby advanced: 1) the types of extension services include community development, capability/skills trainings, tutorial, livelihood and technology transfer, among others; 2) majority of the respondents believe that the extension programs, projects and activities were effectively delivered to a great extent; 3) the major difficulty of extension implementers in the conduct of extension services is the hectic schedule of faculty members due to multiple functions in the institution and 4) suggestions to address the challenges on the conduct of extension services include reduction or equivalency of teaching units to extension work.

Relevant to the findings and conclusions, the following are hereby recommended: to address the issue on transportation, SUCs who are still starting community engagements may adopt or work with communities with closer distance to the university. It has been suggested that close distance with partner communities will more likely influence success [16]. However, for other programs, projects or activities, a dedicated vehicle for extension services will provide great advantage for the efficiency of service delivery as well as for the comfort of the extensionists. A continuous capability building activities for extension service implementers may be considered by the SUCs. Furthermore, the extension services unit of the SUCs create a monitoring and evaluation team, external to the project implementers.

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